BUSINESS MAY 22, 1948



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Lawrence A. Appley: A new job, a management opportunity (page 6)

BUSINESS WEEK NDEX

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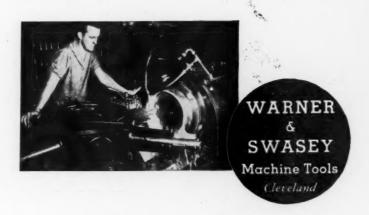
What the label doesn't tell

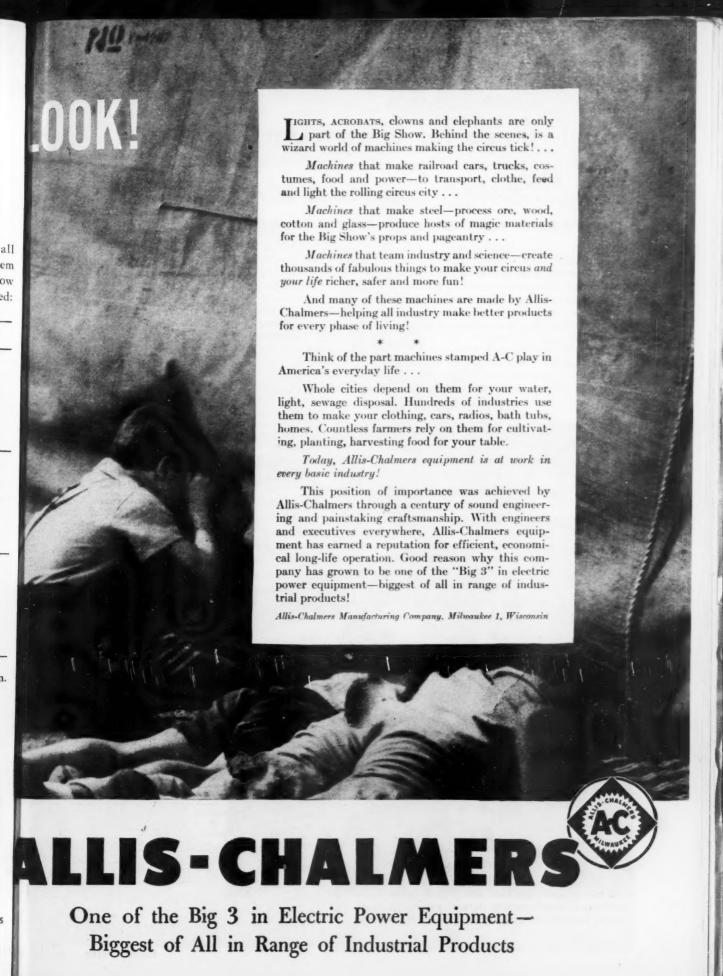
THERE'S a law requiring that any dangerous ingredients in foods and drugs be printed on the label. Unfortunately there is no such law covering ideas. • Millions of people over the world are

being led into horrible enslavement because all they can see is a label which looks pretty to them—a name which sounds appealing. Let's see how these labels would read if the truth were required:

THE LABEL	THE INCENTIVE	THE WORK	Slave labor camps. Permanently low standard of living. Dictators who rule by fear, and for whose power the people slave.		
Communism	Work to avoid starva- tion-or face the firing squad.	Back-breaking work to the limit of human en- durance in return for the "security" of being kept alive.			
Socialism	No incentive because no one can progress. Workers and industry dependent on politicians.	Slow and inefficient because there are not enough tools. Small chance of getting them because there is no one to save capital with which to create them.	Low production and hence low standard of living. History is full of failures of socialism. Must turn eventually into communism or the incentive of capitalism.		
Americanism	Good wages because of good tools. The right to select the work you do best, to earn and enjoy leisure—the "pursuit of happiness".	Efficient work; high production, because of constantly better tools.	The world's highest standard of living; the world's highest standard of freedom and decency.		

All of which shows it pays to find out what's behind the label. Otherwise you may be taking not a cure but a poison.





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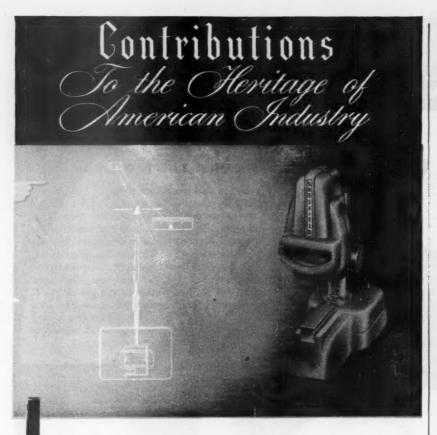
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Twenty years ago, American industry was dependent on precision measuring instruments from Europe. About that time, Sheffield Research Engineers inaugurated the development which not only emancipated American industry from European influence in precision but has given the United States world leadership in precision measuring instruments concurrently with its leadership in precision manufacturing generally.

These engineers applied a new mechanical principle to precision measurement—the Reed Mechanism which operates without friction. It was the heart of the Electrichek, a truly American Comparator, the original of which is now on exhibition at the Smithsonian Institution.

Soon thereafter, the weightless light beam lever arm was added to the Reed Mechanism to produce the now famous Visual Gage, which is today in wider use by industry than any other precise gaging comparator. It is wise and thrifty to specify Sheffield.

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THE COVER

Just as the ancients turned to the Dephic oracle in their perplexity, so modern business executives in increasing numbers have got in the habit of taking their problems to the American Management Assn. And for 14 years it has been Alvin E. Dodd, presiding over A.M.A. headquarters, who has helped them find the answers.

• Change—Now Dodd is retiring. Taking his place is 44-year-old Lawrence A Appley—formerly of Vick Chemical Socony Vacuum, War Manpower Commission, and currently vice-president of

Montgomery Ward.

When A.M.A. was organized 25 year ago, Larry Appley was making change and punching transfers as a summe conductor on a Broadway trolley line in New York. Now, a generation later both man and organization stand at the top in their fields. In the last decade both have moved up together.

• Niche—In 1930, Appley resigned a instructorship in public speaking a Colgate University to go into personnel It was a pure example of a man finding his niche. To it he brought many important qualities for the job—the ethica values which he got from his childhoot in his father's parsonage; the quick, in quiring mind of a stable intelligence which matured in a time of change.

By the time he became educational director for Socony in New York City Appley and the A.M.A. knew each other well. One of the most popular speakers at A.M.A. conferences, he became vice-president of the association personnel division.

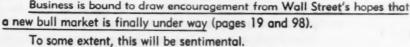
• Dividends—He was one of those bus men who never seem too busy to coperate in A.M.A. planning. And like the other business experts who give of their limited time to A.M.A., he says he always got more than he gave.

Appley is sure that this favorable balance of exchange will continue not that he is giving A.M.A. his full time

-Complete story on A.M.A starts on page ?

BUSINESS OUTLOOK

BUSINESS WEEK MAY 22, 1948



But there is a good practical side to it, too. Enthusiasm for listed stocks is bound to carry over into new issues.

Many companies now should be able to sell stock instead of borrowing at the bank or floating bonds.

Never before this postwar era have investors been confronted with a peacetime economy running at full steam. They have felt it was too good to

Finally they have agreed to "buy" it. And buy they did, indeed. Turnover in listed common stocks has been the biggest in years.

Wall Street seems to be chanting: "This boom is not ephemeral; profits are not chimerical; depression is not inevitable."

That's quite a change of tune. It is devoutly to be hoped that this sudden optimism is not overdone.

A technical reaction is likely after the 25-point rise in the stock averages. This might make investment money run back to the storm cellar.

Four industries can be said certainly to face no decline this year. These are petroleum, autos, steel, and railway equipment.

Another that is very unlikely to slide is construction. There will be no decline in demand for housing, but there might possibly be a contraction in the funds to effectuate the demand.

Together, though, these five provide a stiff spine for the economy.

Home building remains one of the very strongest spots in the business picture, yet one of the most puzzling (BW-May1'48,p10).

Price is the ominous factor. United Industrial Associates, Inc., figures a home that cost \$4,599 in 1939 (national average) was up to \$10,769 in March of this year. April figures would show another rise.

Nevertheless, the Dept. of Labor estimates builders started 90,000 new homes in April—up 29% from March and 34% above a year ago.

Value of new construction put in place in April (all types, including public works) was \$1,269-million, says the Labor Dept. That was 9% ahead of March and an increase of 37% over a year earlier.

And construction contractors added 163,000 workers last month. This brought the total to 1,790,000, highest April figure since 1942.

Tighter mortgage money may crimp housing later, but it wasn't doing so as recently as last March.

Nonfarm mortgages of \$20,000 and less totaled \$955-million for that month. This is up 11% from a year earlier and the highest for a March since the Home Loan Bank Board has been compiling the records.

For the first quarter, however, commercial banks lent 2% less on mortgages than in the 1947 period. All other classes of lenders topped a year ago.

Growth in the size of the average mortgage loan is one of the things that continue to bother observers.

All through 1947, the size of the individual loan grew. Average for the

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BUSINESS OUTLOOK (Continued)

BUSINESS WEEK MAY 22, 1948

year was above \$4,400 per mortgage. In March of this year the 207,715 mortgages tabulated were nudging the \$4,600 level.

Price shows up here. The more the home costs, the bigger the loan.

In a few instances, high levels of home building aren't the bonanza to suppliers that they should be.

Minneapolis-Honeywell is steadily diversifying its line of products but remains very much interested in home thermostats. This week, the company announced it is laying off 300 men because of limited orders.

Limitations are caused by (1) inability of manufacturers of furnaces and boilers to get all the steel they need, and (2) the ceiling that tight fuel oil supplies put on the installation of oil burners.

Crude petroleum prices still are threatening to go higher. The big companies are having all they can do to hold them.

Despite record crude production (around 5,400,000 bbl. daily against an average of some 3,500,000 prewar), refineries have trouble getting all the oil they can use. So they bid over the posted price.

Premiums like these forced the two earlier price rises. They threaten to do the same thing again.

Gasoline station operators, in sections of the country where supplies are allocated, already are looking for new sources of income.

Methods were mainly learned during the war. Some are bolstering their repair departments. Others are pushing an old standby—tire, battery, and accessory sales. Quite a few are considering stocking any kind of merchandise that might appeal to their customers.

Meanwhile, with the constant danger of pumps running dry, operators can grab a little leisure—close earlier evenings, maybe all day Sunday.

Motoring vacationists should check gasoline supplies before they pick the section they want to visit. Dealers in the tightest areas are even beginning to wonder if they will have gas for all their old customers.

Cottonseed oil is going to be very tight until ginning of new-crop cotton gets into full swing in August and September. Users have contracted for available supplies to cover the summer months.

That accounted for one of this week's hottest price situations. The oil shot up 2¢ a lb. on Tuesday, almost as much again on Wednesday.

Buyers also had their eyes on Senate action on the oleomargarine taxes. Margarine's raw material is more than 50% cottonseed oil.

Metals producers in this country have felt for some time that need for dollars might attract foreign selling in this market. The idea is that the producing country might want the metal but need dollars more.

Now there is a report in the domestic metal trade of such business.

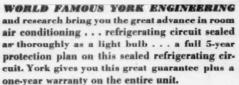
Italy had applied for a lead allocation under the Marshall Plan. But in the last few days, Italians are said to have been offering lead here.

Actually, though, only one nonferrous metal has had its price socked by foreign competition. That is quicksilver. Spanish sales have sent prices crashing. A lot of high-cost U. S. mines have closed down.

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FIGURES OF THE WEEK

-1923-25=100			1923	-25=10	00-7
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220			1	11	190
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180				4	180
SEE WEEKLY CHART	->				170
160					
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1945 1946 1947 1948		1947		1948	
	§ Latest Week	Preceding Week	Month Ago	Year Ago	Averag
Business Week Index (above)	*192.0	†190.6	179.1	187.4	162.
PRODUCTION					
Steel ingot operations (% of capacity)	95.4	94.3	80.0	96.1	97.
Production of automobiles and trucks	82,155	184,684	104,761	82,881	98,23
Electric power output (million kilowatt-hours)	\$22,022 5,109	\$24,273 5,087	\$24,746 5,087	\$18,422 4,616	\$19,43
Crude oil (daily average, 1,000 bbls.)	5,423	5,413	5,391	5,008	3,84
Bituminous coal (daily average, 1,000 tons)	2,114	†2,312	406	2,177	1,68
TRADE					
Miscellaneous and L.C.L. carloadings (daily average, 1,000 cars)	83	83	82	84	8
All other carloadings (daily average, 1,000 cars)	63	66	32	63	5
Money in circulation (millions)	\$27,762	\$27,762 +7%	\$27,774	\$28,134	\$9,61
Business failures (Dun & Bradstreet, number)	+6% 100	108	+13%	+13%	+179
PRICES (Average for the week)					
Spot commodity index (Moody's, Dec. 31, 1931=100)	419.1	416.4	421.5	399.9	198.
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939=100)	276.3	274.5	271.7	262.9	138.
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939=100)	382.0	374.8	377.4	339.8	146.
Finished steel composite (Steel, ton)	\$80.27 \$40.66	\$80.27 \$40.66	\$81.14 \$40.33	\$69.82 \$29.58	\$56.73 \$19.48
Copper (electrolytic, Connecticut Valley, lb.).	21.500€	21.500¢	21,500€	22.413¢	12,022
Wheat (Kansas City, bu.)	\$2.42	\$2.42	\$2.49	\$2.64	\$0.99
\$Sugar (raw, delivered New York, lb.)	5.05¢	₹5.12¢	5.36¢	6.19¢	3.38
Cotton (middling, ten designated markets, lb.)	37.88€	37.36¢	37.87¢	36.00¢	13.94
Wool tops (New York, lb.)	\$1.965	\$1.911	\$1.785	\$1.389	\$1.281
Rubber (ribbed smoked sheets, New York, lb.)	23.49∉	23.60¢	23.05¢	20.90∉	22.16
FINANCE 90 stocks, price index (Standard & Poor's Corp.)	130.2	125.3	122.7	110.7	78.0
Medium grade corporate bond yield (30 Baa issues, Moody's)	3.37%	3.41%	3.47%	3.18%	4.33%
High grade corporate bond yield (30 Aaa issues, Moody's)	2.77%	2.77%	2.77%	2.53%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average)	11%	11%	11%	11-11%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	11%	11%	13%	1%	1-1%
ANKING (Millions of dollars)					
Demand deposits adjusted, reporting member banks	46,373 63,174	46,529 63,132	46,210 62,855	45,760 63,137	1127,777
Commercial and agricultural loans, reporting member banks	14,255	14,205	14,333	11,960	116,963
Securities loans, reporting member banks	1,650	1,577	1,533	1,997	++1,038
U. S. gov't and gov't guaranteed obligations held, reporting member banks	35,499	35,640	35,260	39,197	++15,999
Other securities held, reporting member banks	4,228	4,246	4,326	4,026	††4,303
Excess reserves, all member banks	930	860	870	787	5,290
Total federal reserve credit outstanding	21,038	20,856 te for "Lates	21,130	22,233	2,265
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WASHINGTON OUTLOOK



U. S. FOREIGN POLICY is at a turning point. But the policymakers themselves don't see which way they will

have to turn. They are confused and uncertain in the face of what now looks like a full-fledged Russian "peace offensive" (page 115).

It's like an Indian wrestling match: You've been pushing shoulder-to-shoulder against the other fellow. Suddenly he stops pushing.

You can't tell: Maybe he's quitting; maybe he's just leaning back, to let you fall on your face.

But whichever it is, you've got to catch yourself up quick if you're going to stay on your feet.

Up to now, the Truman tactic has been counterpressure against the Russian drive. The Truman Doctrine in Greece, the Marshall Plan, the draft—each one was sold to Congress and the public as a stop-Russia move.

Soon, policymakers may have to get along without this emotion to work on. Then, they may be forced to find new tactics to jibe with the temper of a peace-happy public.

That's if Russia keeps on being nice, of course. Whether Russia means it, is the real question—as we said last week.

This week's broadcast by Stalin himself shows that something big is going on over there. You can't tell for sure:

Is this a quick feint to cover some new thrust?

Or is the Politburo really trying to end the postwar struggle that's been keeping the world in turmoil?

We think there is evidence—we've been reporting it to you since February (BW·Feb.7'48,p15)—that Russia does want to call off the contest; that it's feeling the pressure of U. S. action in Europe; that it's decided to buy 5 or 10 years' time by playing along with the reconstruction of Europe.

You can see already how public opinion—both here and abroad—is forcing the Administration to take this Russian thing more seriously.

After the exchange between Ambassador Bedell Smith and Foreign Minister Molotov, Truman emphasized that it hadn't strengthened his faith in peace.

One short week later, the State Dept.'s formal response to Stalin's overture was: ". . . encouraging. . ."

But, the department said, Russia and the

U. S. can't settle world issues between themselves; other nations would have to sit in.

DON'T BOTHER TO READ the economic report that Sen. Taft's Joint Committee belatedly brought out this week—at least, not if you've been following Taft's campaign speeches.

You can get the report in a neat printed pamphlet. But the original typescript we read was a composite of pages pulled together from a dozen drafts, some dated as far back as March.

Sample quotation: "With regard to immediate action relating to taxes, we disagree with the President's recommendation that a cost-of-living tax credit of \$40 be given for each taxpayer and each dependent. . . ."

The one interesting "finding" in the report is the one we told you about last week: Taft feels that Truman's Council of Economic advisers is sticking its nose into social and welfare matters that it ought to consider none of its business.

On the other hand, Vice-Chairman Wolcott at first refused to sign Chairman Taft's report. Wolcott's reason: It goes into matters under the jurisdiction of his House Banking Committee. Next day, however, he did reluctantly sign.

CARTEL CONTROL of scarce industrial materials is being urged on Truman—as the most feasible way of dealing with defense and foreign-aid pressure on metal supplies.

It wouldn't be labeled that, of course. It would appear as a revision of the present floundering voluntary allocation program. The proposal is to amend Taft's voluntary-control law to:

- (1) Eliminate the Justice Dept.'s veto on any allocation schemes that look monopolistic.
- (2) Drop the public hearings now required before any plan goes into effect.

The idea behind all this is: If you are going to rely on voluntary measures to take the place of government controls, you have to recognize that you are asking industry groups to divvy up orders and supplies. That's what a cartel does—and a cartel, even a government-sponsored one, can't operate efficiently in a goldfish bowl.

This plan may never break into the open. But it's the nearest thing to government controls over production that you need to watch for this year.

The sweeping control plan that Arthur Hill's

WASHINGTON OUTLOOK (Continued)

National Security Resources Board drew up—the one we told you about last week—got a flat turn-down at the White House.

Truman didn't like the way Hill's scheme mixed mobilization controls for future use in wartime with immediate measures to handle present scarcities. He didn't like the idea of having Hill administer controls. And he thought the whole setup threatened too much military dominance, particularly since it was tagged as a Ferdinand Eberstadt brainchild.

So now, two alternative approaches are being worked out for Truman by a special committee in which Commerce Dept. people have the key spots; they're the ones who opposed the Hill plan.

One proposal would be complete down-the-line allocation of steel and the major nonferrous metals. If you want to allocate at all, the government boys figure, you've got to go whole hog.

By the time you take care of government and foreign programs and key industrial expansion, you've grabbed off nearly half the steel. As they see it, you can't just let people scramble for the rest.

No one thinks real allocation could get through Congress. But Truman may go for it anyway. It would be a political sop to New Dealers, would put him on record with a program that might look good in November if industry has tied itself in knots meanwhile.

In case Truman wants something with a chance of passage, the committee has prepared a second scheme built around voluntary controls.

Their plan:

- Voluntary allocation with the antimonopoly shackles taken off.
- (2) The priority for military orders already included in draft legislation (BW-May8'48,p15).
- (3) New spot priorities for emergency health and welfare needs.

If armament expands no farther, they think this might do the trick.

THE SECOND TAX BILL you have been hearing about will reach the House floor in a few days.

Ways & Means Chairman Knutson describes the measure as technical and noncontroversial. It would do things like these:

(1) Let corporations carry losses forward for five years as an offset against taxable profits, but

limit them to a one-year carryback; present law permits two-year carryback, two-year carry forward.

- (2) Block manipulation of commodity-market trading to transform short-term capital gains into long-term gains.
- (3) Shift to the government the burden of proof that a corporation is retaining an unreasonable portion of earnings to avoid taxes.
- (4) Permit employees to pay capital-gains tax, instead of income tax, on profits from cut-rate stock options given by employers.

A good bit of this doesn't look so noncontroversial to chairman Millikin's Senate Finance Committee

Anyway, Millikin isn't anxious to let another tax bill reach the Senate floor this year; he's afraid embarrassingly costly amendments would get tacked on—excise tax cuts, for instance.

So, don't count on Knutson's bill this year.

THE BUTTER-MARGARINE FIGHT was all it took to guarantee that there won't be any long-range farm legislation from the 80th Congress.

It has blocked the efforts of leaders like Sen. Aiken and Rep. Hope—chairmen of Senate and House Agriculture Committees—to get the southern and middle-western factions of the farm bloc to agree on a postwar system of price support, parity, and crop limitation.

Aiken had just about got his senators lined up when the margarine-tax repealer came along. He still expects to run his farm bill through the Senate.

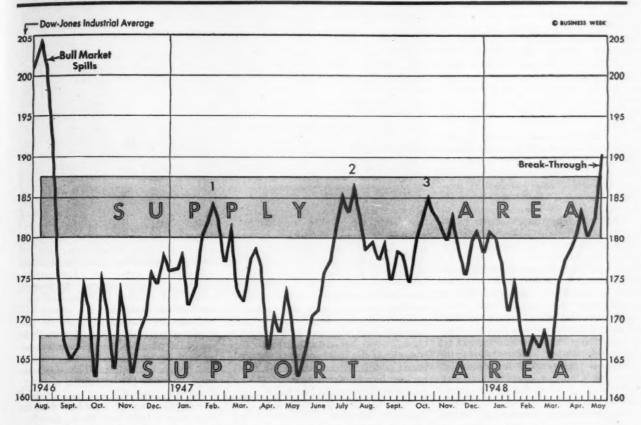
But in the House, where the butter boys are tossing in spite bills aimed at cotton and tobacco growers in the oleo country, there's no chance left to get the feuders together.

So, it looks as if Congress will come up with another one-year extension of the wartime Steagall Amendment. That guarantees practically every farmer 90% of parity on all he produces.

- Truman's people are going to try out Taft-Hartley repeal as a campaign issue. Under-Secretary of Labor Dave Morse will make the first speeches soon; if they go over, Truman will have something to say too . . .
- There's a new word creeping into the jargon of the bureaucrats. They're picking it up from atom scientists who discovered during the war there is such a thing as a million dollars. The word: megabuck—you know, like megacycles.

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Stock Market Makes the Break-Through

After three tries, it crashes the ceiling. And it looks as though it meant it. But bull signals could prove wrong.

Wall Street this week was celebrating what it firmly believes is a new bull market. After three tries and three failures (chart above), the stock price averages finally slammed through the upper resistance level that has hemmed them in for a year and a half (page 98). This took them out of the "supply area" where each rise has met a deluge of stock for sale.

As far as traders are concerned, the sky now is the limit. The threat of an early technical reaction from the swift advance of the last two months scarcely bothers them.

• End of Gloom—For the businessman, the main significance of the breakthrough is this: The stock market is taking back its gloomy predictions about the near-term future of the economy. Apparently, it is now betting that the business boom will continue, that corporate profits will stay high.

Ever since the break in September, 1946, the stock market has been the

one dark spot in the business picture. Month after month, sales and earnings have knocked out new records. But the market has floundered dismally in a narrow range, some 10% to 25% under its 1946 highs. If it was making any prediction at all during this period, it was saying that the boom could not last, that business was headed for trouble of one sort or another.

The break-out changes all that. The market now joins the chorus of prophets who see no early end to the current prosperity.

But if the market was wrong before, it could be wrong now. Before he can appraise the meaning of the breakthrough, the businessman will have to examine the credentials of the new bull market and decide just what made traders change their minds.

• Labor Situation Helps—One thing certainly was the labor situation. Right or wrong, Wall Street thinks that labor has been forced onto the defensive. The

stiffening attitude of companies, such as General Electric and U. S. Steel, in third-round wage negotiations made a deep impression on traders. And nobody in Wall Street has overlooked the failure of the meat strike, the federal action against John L. Lewis, and the failure of the railroad brotherhoods to extract additional concessions by strike threat.

As investors see it, contract negotiations are coming up with the unions not in the saddle—for the first time since the end of the war. This does not mean the breaking of the unions or the end of union power. (Many in Wall Street talk as though it did.) But management is asserting its right to bargain. Before this, management has simply tried to hold down its concessions on wage increases and fringe demands.

• Armament, Too-Equally important in Wall Street thinking is the increasing armament program that emerged this spring. And coupled with that is the brighter tone of the international picture since the Italian elections.

The new defense program means that the government will be spending heavily for arms and European aid, at least for a couple of years. And at the same time the hints of a less aggressive policy on Russia's part suggest that the dangers of war or of warlike mobilization of the U.S. economy may be letting up a trifle.

• Stability Ahead—All this adds up to a situation that obviously looks good to the stock market. Apparently, what Wall Street is betting on is a long period in which government spending will be big enough to put a powerful prop under business—but not big enough to dominate the economy completely.

In this period—so traders think—prices and wages will be fairly stable. At least, they will be steady enough so they won't press uncomfortably on profit margins. And government controls, if any, will be too mild to make a serious dent in sales or earnings.

This is a rough sketch of the glowing picture that the bulls have before them. And there are other bullish elements to consider.

• Other Bullish Factors—One is the tax cut that has just taken effect. It is too early for investors to have piled up any money from the reduced rates. But Wall Street is hoping that a good slice of the \$5-billion addition to individual incomes after taxes will find its way to the stock market. Meanwhile, it is getting a psychological lift from the fact that Congress saw the need for lightening the tax burden on the upperand middle-income brackets.

Another thing is the coming election and the prospect of a change of administration.

• In Balance—Finally, there is the fact that inflationary and deflationary forces seem to have reached a rough balance, even if it proves only temporary. Farmand-food prices are easing seasonally. Industrial prices are firm, but not rising much. Soft goods producers in a few lines are paying lower prices on their raw materials, though not enough to make a difference in the total price level

Theoretically, inflation should be bullish for common stocks. But the market has demonstrated in the past couple of years that inflation scares it. Traders are afraid that corporations will get caught with rising costs that can't be passed along to consumers fast enough to protect profit margins.

• In Focus—Many of the bullish elements in the present picture have been there all along. But they didn't come into focus until the past few months. Now Wall Street can see them all at once. Hence, it is more inclined to start marking up its valuation of the earnings and dividends that corporations are ringing up. Fundamentally, that's what explains the break-through.

• Big Question—Now that the averages are out of their pen, the big question

are out of their pen, the big question for Wall Street is how far its new bull market will go. You can get all sorts of opinions—most of them bullish just now—but the real answer is that nobody knows.

Activity on the Big Board late last week and early this week looked like an old-fashioned bull market with all the trimmings. Big blocks of stock changed hands rapidly in contrast to the small package buying of recent months. Volume of trading was the heaviest in years.

• Who Gained?—By and large, the leadership was good. Old favorites like General Motors and Big Steel made solid gains. But there was also the eager speculation in the "cats and dogs" that characterizes a bull market. When the public comes into the market, it almost

always goes for the penny arcade.

On the Curb Exchange, for instance,

Commonwealth & Southern warrants sold for \$\frac{1}{2}\$. They had been down around \$\frac{1}{2}\$. They entitle the holder to buy a share of Commonwealth & Southern at 30 (it's now selling at 3\frac{1}{2}).

Tri-Continental Corp. warrants got up to 41 after a 1947 low of 11. They entitle the holder to buy for 18.46 a

stock now selling at 10½.

No Ceiling?—Many a customer's man is now talking about an "objective" of 250 or better for the Dow-Jones industrials. (The peak of the 1942-1946 bull market was 212.50.) Others are hitching their wagons to even brighter and more remote stars. Some men in Wall Street will tell you that there is no reason this market should stop short of the stratospheric 381 that the Big Bull Market reached in 1929.

But before a businessman lets this sort of stardust sift into his planning, he should stop and take a look at some of the question marks in the current market situation.

First, the break-through doesn't give anybody a guarantee that the market will keep on going up. Technically speaking, it makes the current movement a bull market. But technical signals can be wrong.

• Causes for Caution—It's worth remembering that the bear market that just ended wasn't anything like a typical bear movement. There was no cumulative decline in prices. The averages simply dropped like an express elevator to a new trading range and stayed there. This means that the new bull market starts from a fairly high level. Already, it is in territory that historically has proved dangerous ground.

Another thing to remember is that improving stock prices will touch off a flood of new issues. Many a corporation has been waiting impatiently for a chance to put out new stock to meet today's increased capital requirements. These new securities will compete with the old ones for the capital that investors make available.

And finally, no one should forget that the market seems to be laying its bets on the assumption that the U. S. economy can strike and hold an extremely delicate balance. Any one of a dozen things could tear Wall Street's elaborate calculations to shreds.

• Uncertain Predictions—Russia, for instance, might start getting nastier instead of backtracking. Or, on the other hand, Russia might become so genteel that we would ditch our arms program. (Admittedly, that's a long shot.)

Management might not win out in third-round wage negotiations. Prices might get out of hand in the second half of this year as government spending steps up.

Any of these developments might make Wall Street change its mind again. But for the moment, anyhow, it is betting against them.



BIG BOARD'S big business. Last week saw the heaviest Saturday trading in 15 years on the N. Y. Stock Exchange. And trading was broadest ever for a Saturday



Rocket Spurs Peacetime Industry

The innards of a rocket look like this one, now on display at New York's American Museum of Natural History. Its developer was Dr. Robert H. Goddard, American rocket pioneer. Engineers are still working to perfect such wartime devices—and are learning some valuable peacetime lessons in the doing. Rocket study has helped develop high-temperature-resisting metals, processing techniques, new concepts in fuels.

Spring Boosts Tire Sales

Mild recession seems to be over, although supply has met demand. Industry feels increased motoring, use of more natural rubber will keep sales high. But wage raises would boost prices.

The rubber companies this week were enjoying spring weather, the well-known tonic for tire sales. In Akron, it looked as if the industry had begun to crawl out of the mild recession it experienced earlier this year (BW-Mar.27'48,p23).

• "The Cold-Feet Months"—Manufacturers had a bad time in the "cold feet months." That's what the trade often calls the first quarter of the year in normal times—when a sales slump throws a scare in management ranks. Consumers' demands for replacement tires had been met last winter.

At the same time, dealers had all the stocks they wanted. Factory inventories had risen to prewar standards. So manufacturers threw the brakes on production rather than take a chance on a spring pickup.

• The Outlook—Now that business is looking better, men in the industry are appraising the over-all position. Generally, they agree that:

sales will improve for tires as summer comes along. Nontire items have had no slump.

PRODUCTION will emphasize more use of natural than of synthetic rubber. PRICES will stay where they are unless costs drive them up.

• Third Best Year?—Market analysts generally believe that 1948 should be at least the third best year in the tire industry's history. Sales managers see another big season of summer driving, with more cars on the road than ever before. This means more tires wearing out and more replacement sales. They also say that the European Recovery Program will help to bolster sales.

• Questions—They would feel safer in their tire forecasts if they knew the answer to these two questions:

(1) Will their industry get through the third-round wage negotiations (BW -Apr.17'48,p113) now under way without a crippling strike?

(2) How long will the strike last at Chrysler (page 110), which is tying up one-fifth of the new-car output and original tire equipment business?

 Wages and Prices—Many rubber executives openly predict that a hefty new wage boost would force a hike in tire prices. The United Rubber Workers are asking a 30¢-an-hour increase including health and welfare benefits.

Manufacturers emphasize that production costs are already at a record high. They believe that a further squeeze on their margin could mean only one thing—an upward trend in prices on first-, second-, and third-line tires.

• More Natural Rubber—On the production front, the industry has been increasing its use of natural rubber. In 1947, the industry split its use of natural and synthetic rubber virtually 50-50. This year, with tree rubber somewhat more plentiful, the ratio is expected to be 60-40 in favor of natural.

In the first quarter of 1948, the industry used 163,000 tons of natural rubber as against 116,000 tons of synthetic. This consumption of natural rubber was five times as much as the industry chewed up in the first quarter of 1946, the first full postwar year. Total rubber consumption for the first three months of 1946 was 238,000 tons—all but 33,000 tons of it synthetic.

The larger use of crude rubber emphasizes one point that industry tire experts readily admit—natural rubber has a considerable consumer preference. Also, crude rubber is considered necessary in truck and heavy-duty tires because it generates less heat than synthetic.

Synthetic rubber continues to be favored in certain industrial applications. Wire cable is an example. The uniform quality of synthetic reduces the problems in milling and compounding encountered in using natural rubber.

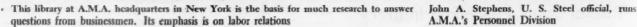
• No Limit—There is no top limit on the amount of natural rubber that manufacturers can use under the rubber act of 1948. It does specify that a minimum of 200,000 tons of general-purpose synthetic must be used in transportation items plus 22,000 tons of special-purpose rubbers. Government rubber regulations are now phrased to specify the minimum amount of synthetic that must go into a passenger tire. Previously, the regulations set a maximum on the amount of natural rubber that could be used.

This change reflects the intent of the new legislation: Its aim is to assure consumption of enough synthetic to maintain a domestic rubber-producing industry adequate for national security. Enforced use of synthetic also allows for continued stockpiling of natural rubber by the government as a security measure.

• Smaller Stockpile—But there is a belief that the natural-rubber stockpile would not have to be as great as the 600,000 tons available after Pearl Harbor: The war-born synthetic industry can step up production rapidly in case of an emergency.



A.M.A. Helps Management Plan . . .





A.M.A.'s Personnel Division

Answering Questions for Businessmen

American Management Assn. does high-quality research work in a half-dozen fields to help its members solve their problems.

One of management's biggest professional groups got ready this week to celebrate its 25th anniversary and to inaugurate a new president. The organization: American Management Assn. Its new chief executive: Lawrence A. Appley (cover). Neither is a stranger to the other: Their being tied up officially

With Management Know-How ... Alvin E. Dodd is retiring as A.M.A. president after 14 years on the job

merely formalizes a long-standing intimacy

• Transition—On July 1, Appley moves to New York from his vice-presidency of Montgomery Ward & Co. in Chicago. And at that time Alvin E. Dodd, A.M.A. executive since 1934, retires to become an A.M.A. adviser. It will be, Appley hopes, "an imperceptible transition."

Dodd, less reticent, considers Appley's election a big forward step for the association which, under his own presidency, rose to its present eminence.

• Unique Group-Among management organizations the A.M.A. is unique in its intensively cultivated interests in a half-dozen fields; in the objective approach and research on which its authority rests; in the steady volunteer participation it gets from people like Appley, already too busy in high corporate jobs. These practicing business experts, together with a small professional A.M.A. office staff, do the organization's planning and handle its production and activities.

There is nothing "special" about what A.M.A. does. Its conferences, publications, and research are more or less standard for business and trade groups of all types. In the fields that these groups cover, discussion meetings, published material, and investigations can be had by the bushel. But A.M.A.'s distinction is that its work in industrial relations, marketing, production, finance, office management, insurance, and packaging is of a high quality.

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• Clearing House-A.M.A.'s New York office acts as a clearing house for current information in all of these fields. When any of its 12,500 members tells A.M.A. which of the "divisions" he is interested in, the organization gives him the information on it. If A.M.A. doesn't have the answer, it can usually tell him where to

Once a month members get the Management Review, a digest of 1,200 publications which may have printed something a businessman shouldn't miss. Twice a month management-men get Personnel, which is a report made up of original papers in the field of industrial and human relations. Conference transcripts, research reports, and check lists are issued at regular intervals.

• Editor-A.M.A. conferences, research, and publications in recent years have been under the immediate direction of James Rice, editor and assistant secretary. The association's conferences have been drawing 15,000 executives a year; meetings have become so crowded that they are now confined to members only.

Research reports are written along practical, how-to-do-it lines. Subjects range from the cosmic (methods of stabilizing industrial employment) to the microcosmic (employee interviewing). Typical recent research projects: Collective Bargaining in the Office; How to Prepare and Maintain a Supervisor's Policy Manual. A report due out soon will



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Murray Shields, Bank of the Manhattan Co. official, heads the Finance Division

be on the administration of insurance buving.

• Labor Relations—Although Dodd's background was in marketing and the organization has spread-eagle interests, A.M.A. has become best known for its work in labor relations over the last decade. And there are some—those interested in the less glamorous aspects of A.M.A.'s work—whose first reaction to the Appley appointment was that it meant a further emphasis on labor.

But this isn't so. Appley is determined to see that there are no dents in the full circle of A.M.A. activities—that while the labor work goes on in as high gear as before, the other divisions must keep pace.

This is what Appley is taking over:

Personnel Division

A.M.A. activities in the broad field of industrial relations stem principally from this group. It is headed by one of the country's top labor-relations executives—John A. Stephens, vice-president in charge of industrial relations for United States Steel Corp. As an A.M.A. vice-president, Stephens heads a Personnel Council of top-level personnel and industrial relations men. Its objective: to guide A.M.A. in mapping specific programs for better employer-employee relations.

better employer-employee relations.

Here's how the Personnel Council

A.M.A. members are questioned from time to time on what they think are their most urgent personnel problems. The volunteer (unpaid) council members sift the answers, then pass the problems on to A.M.A. industrial relations researchers—along with suggestions. The council reads the researchers' reports, sometimes



. In Production

George S. Dively, head of Harris-Seybold Co., runs the Production Division

has them revised. Finally, management reaps the benefits at industrial relations conferences, or in pamphlet form. In 1947, employers said that they wanted to know how to set up better communication lines between management and rank-and-file. A.M.A. got busy. The result: a series of reports, including one on "Checking the Effectiveness of Employee Communication."

• Negotiation Studies—Papers and panel discussions have dealt at length with union negotiations. Arbitration, job evaluation techniques, merit rating and employee testing, and foreman training have been subjects of other recent studies.

When management began to get concerned over problems of bargaining with office workers' unions, A.M.A. took over. It issued a thorough special report on "Collective Bargaining in the Office" (BW-Feb.7'48,p88). This research job—as many others in A.M.A.—extended over more than one division. The personnel and office management divisions watched its drafting.

• Guidance—In the personnel division, as in its other groups, A.M.A. deals with specific problems through pamphlets and book-length reports. It handles many general problems through conference talks and panel discussions. A.M.A. doesn't expect these things to give bosses help on concrete, everyday labor problems. Instead, it hopes to stimulate management thinking and guide it on long-term deci-

Finance

This division, headed at present by Murray Shields, vice-president of the Bank of the Manhattan Co., concentrates



. . . In Marketing

W. E. Jones, Scranton Lace Co., official, concentrates on business sales policies

on the broader aspects of financial policy. For this reason, one of the main interests of the finance conference this year was in sources of funds for capital expansion. This problem was discussed by a panel of representatives of the main sources of capital—commercial banks, savings banks, insurance companies, underwriters, and the market. Prof. Sumner Slichter of Harvard gave his views on the vital question of the long-range demand for capital.

 No. 1 Worry—A.M.A. believes that the No. 1 worry of finance men today is the possibility of loss through inadequate depreciation or over-valued inventories. An accounting authority discussed the rela-



. . . And Good Administration James O. Rice is in charge of conferences, research, and publications

tive merits of accounting techniques that can be used to guard against these dangers. Another major finance problem-tax prospects-was considered on

a long-term basis.

One of A.M.A.'s contributions to progressive management has been its work on the problem of presenting company financial statements in a form that the average stockholder and employee can understand. Earlier conferences on this subject led to the publication of an A.M.A. research report in 1936 on preparing financial statements. This was considered a landmark in this field.

Production

Since the end of the war, practically every industry has felt the effects of a price squeeze caused by continuously rising materials' costs, increasing labor rates, higher shipping charges. One way to ease the squeeze is for the individual company to look into its own housekeeping-production planning, inventory control, plant layout, cost reduc-tion, better labor relations through educational work.

• "How-to" Meetings-To study such problems as these, A.M.A. set up its production division. Now headed by George S. Dively, president and general manager of Harris-Seybold Co., the division sponsors regular "how-to" meetings highlighted by question-and-answer periods in which the main theme is cost-

Last week the production division of A.M.A. held its spring conference in Chicago, had about 700 registrants representing 300 companies. The cost problem was again emphasized. Three main angles were under study: the development and use of cost-control policies; building quality into manpower;

and quality control.

• Handbook-The production division's series of reprints of conference talks is in effect a basic handbook of cost reduction techniques. The reports have a two-way value: (1) They expound basic theory of better production; and (2) illustrate the theories with successful case-histories.

Marketing

Since the war, A.M.A.'s marketing division has been trying to prepare its members for a shift to a buyers' market. So, recent marketing conferences have discussed the use of market research to determine: whether productive capacity should be expanded; ways of keeping a close check on sales; how best to cut sales costs if demand should fall off. This year the division's vice-presidentin-charge is W. E. Jones, who is vicepresident of the Scranton Lace Co.

• Sales Policy-The marketing division has concerned itself mainly with ques-

tions of sales policy. Its sessions are of interest to sales managers rather than salesmen. For instance, A.M.A. figures that marketing begins when plans for a product are first considered, not when the product is ready for sale. Design, probable demand, warehouse and materials-handling requirements, necessary size of sales force-all these should be settled in advance if the sales effort is to be really effective.

A.M.A. meetings have looked into the problem of pricing policies in a period of rising costs. Their aim has been to find ways of fixing the point between prices too low for profit and prices too high for volume sales. Choice of distributors-and how best to maintain good relations with them-was discussed at a recent conference. A sales executive told the 1947 conference how his company has saved money by decentralizing sales management.

· Advertising-How and when to use advertising was a topic of discussion at the last two conferences. The 1948 meeting considered methods of measuring effectiveness of salesmen, and of doing away with the appreciable turn-

over among them.

Packaging Division

Although not properly in a management field, this division developed out of A.M.A.'s marketing activities because there is no over-all trade association for the packaging field. Thus, the annual packaging exposition is the big meeting for this \$7.5-billion-a-year industry. Nearly 14,000 attended this year's exposition, which had 100,000 sq. ft. of display space. The packaging conference, held at the same time and limited to A.M.A. members, drew 1,200.

This A.M.A. division covers packaging, packing, and shipping; so it concerns all business, not consumer industries alone. This year's vice-president-in-charge: E. A. Throckmorton, president of Container Laboratories, Inc.,

Chicago.

Office Management

This division is of interest to all branches of business. Main postwar problems in this field: how to get enough office workers, and how to increase their productivity. Allied with this is greater efficiency (less paper work), the wage problem, and the duties of the office manager as an executive.

Its chief this year is Coleman L. Maze, of New York University.

Insurance

This group is interested in insurance from the industrial buyers' standpoint. It is the only buyers' organization on a national scale. The division's head this

year is R. S. Bass, treasurer of A. E. Staley Mfg. Co., Decatur, Ill.

Recent conferences have taken up the problems arising out of the inability of insurance companies, limited by their capital structures, to keep up with the fast-growing insurance needs of business. The conference this year will pay particular attention to the effect of Public Law 15 (BW-Feb.14'48,p82) on the insurance buyer.

MOORE-RIZLEY BILL DIES

Monkeying with public utility regulation is bad politics in an election year. Republican policy-makers have decided. That's why a G.O.P.-dominated Senate committee last week shelved the Moore-Rizley bill amending the Natural Gas Act (BW-Feb.28'48,p30).

The big pipeline companies have been fighting for the bill more than a year. The main feature is a proviso allowing natural-gas producers a "commodity value" (or free-market price) for the gas they produce. Independent producers already get a "going" price—as much as they can—for their gas; they supply the bulk of what goes into inter-state pipelines. But 22% of total gas output is produced or owned by the interstate carriers. The Federal Power Commission bases rates for that 22% on original cost. While field, or "going, prices keep rising for independents, the pipelines' "take" on their own gas has been frozen.

Passage of the Moore-Rizley bill would have meant bigger gas bills for home consumers, Democrats charged. Republicans, who pushed the bill the hardest, don't believe it. They think industrial consumers would take up any slack. But they are leery of backing up this conviction with their votes-at least

until after November.

HIGHER GOVERNMENT PAY?

The "forgotten men of government" -the \$10,000-a-year administrators of regulatory and other independent agencies-may soon get a pay boost. At least, House leaders are weighing legislation

to that effect.

Rep. Fred E. Busbey (Rep., Ill.) introduced a bill raising the salaries of SEC members to \$15,000 a year. The measure went to the Interstate & Foreign Commerce committee. The committee, according to Rep. Busbey, is broadening the bill to cover all agency heads under that body's jurisdiction. That would mean higher pay for Federal Power Commissioners and all other federal regulatory agency heads.

Rep. Busbey said the committee's changes were O.K. by him. He pointed out that Cabinet members and congressmen had had pay increases, but commission salaries had stuck at \$10,000.

One-Day Show on Southern Farm . . .

Some 700 men and 300 machines moved onto a worn-out dairy farm near Winder, Ga., last week. In a few hours they did more to the 168-acre tract than has been done by its three generations of owners.

Master Soil Conservation Field Day was a mammoth community affair to see what can be done to farmland by modern equipment. The show was sponsored by the Atlanta Journal, state and federal soil conservation officials, local civic groups. More than 100 distributors and dealers selling farm equipment and supplies were on hand; they spent more than \$40,000 to stimulate an interest in dozens of lines.

In a few hours they accomplished 5 to 10 years' worth of land improvement. They constructed two miles of lanes, thinned woods, seeded 90 acres to grasses, spread limestone and fertilizers, checked erosion, planted crops. Next day coowners, M. H. Carlyle and E. C. Blakey, had a farm whose value had jumped \$20,000.



... RAN UP A BARN

Armco Steel Corp.'s local distributor built this \$1,500 auxiliary barn with Steelox panels; it got two coats of paint the same day



... DUG A POND

Caterpillar tractors scooped out a two-acre pond; the military handled communications



. . . TERRACED FIELDS

International Harvester's terracers made drainage patterns on worn-out acreage



. . . PUT UP A FENCE

Ford tractor with Dearborn-Danuezer posthole digger fenced in land



... EVEN MADE A GULLY ...

Bulldozers went to work on an eroded gully three stories deep. This was the most spectacular operation; seven hours later . . .



... INTO A PASTURE

The gully had been smoothed into five extra acres of pastureland. Other equipment limed, fertilized, and seeded the new acreage

Seeking the Man for the Job

Employment agencies switch their emphasis. Stress now is on getting the right man for an opening, rather than any job for a man. New trends bring business, but agencies' costs rise.

During the depression, the employment agency's chief job was to get a job for a man. Today, it still acts as a middleman between the job hunter and the business concern that has a hole to fill. But the slant is different.

A few figures will show the change. In 1934, agencies paid out a total of a little over \$36,000 for "help wanted"

ads in the Chicago Tribune. In 1947, they paid \$484,500-more than 12

Those figures do more than point up the fluorishing state of the employ-ment business: They mark an aboutface in many agencies' approach to their main problem. As one agency head puts it: "Our job is not to find jobs for men.

Upgraded the quality of the jobs they handle. Back in the depression days, it looked as though the job market was times as much-for the same kind of ad. composed chiefly of cooks and waiters. A few weeks ago one agency advertised 24 job openings with salaries ranging from \$5,000 to \$50,000 a year. Changed their techniques in handling higher-bracket jobs. Before the war em-

ployment offices stuck pretty close to the classified columns of newspapers to market their "openings." This sort of advertising has soared. But it's important that today they have added direct-mail brochures and circulars, display advertising, and other selling methods.

It is to find the right man for the

• Changed Course-Tight wartime and postwar labor markets, of course, ac-

count for a lot of the shift. But agencies claim credit for changing their

course to fit the change in the employ-

ment weather. Some of the things they

opening.

have done:

Changed their pitch in placing a client. More and more they are doing a real merchandising job with applicants. They analyze a man to find his best selling points. Then they look for the job that fits. The procedure also helps to find the man that fits the job.

Expanded, in many cases, from local to national operations. Lon D. Barton, president of Cadillac Employment Agency, Chicago, cites this as a not-too-

unusual case:

A Maryland manufacturer needed a secretary-treasurer. The company asked a Cleveland management engineer to help. The engineer went to Cadillac in Chicago. Cadillac placed an ad in the New York Times. The result: The manufacturer got his official, at \$25,000 a

Revised the agency-fee picture. Before the war, employees almost always paid the fee when they got jobs through an agency. During the war, manpower-hungry employers paid the fees on most jobs themselves. Today the trend is back to the prewar status-though there

are many exceptions.

In New York, fee-paying is pretty much back on the prewar basis. According to one estimate, only about 2% of the openings filled by New York agencies are in the "free-fee" class.

In Chicago a few agencies still operate on a 100% free basis; they won't list a job unless the employer is willing to foot the bill.

• Results in Question-The agencies are doing a lush business these days, but there is some argument about the net results. They are spending much more for advertising than in prewar days; they have more openings to list, and advertising rates have climbed. One agency claims that it now spends 40% of its gross for advertising, against 10%



STRATOCRUISER COCKPIT, as modeled in Dehmel Electronic Flight Simulator

For Cheaper, Safer Pilot Training

When an airline adopts a new type of plane, it costs a lot to train pilots in the new cockpits and their controls. Pan American Airways has ordered 20 Boeing "377" Stratocruisers—airline version of the B-29. Deliveries will start as soon as the plane is approved by the Civil Aeronautics Administration. The airline will need three flight crews per plane, plus a few in reserve-about 70 crews in all. The cost of training threatened to be almost prohibitive-until Pan Am and Curtiss-Wright Corp. found a way out.

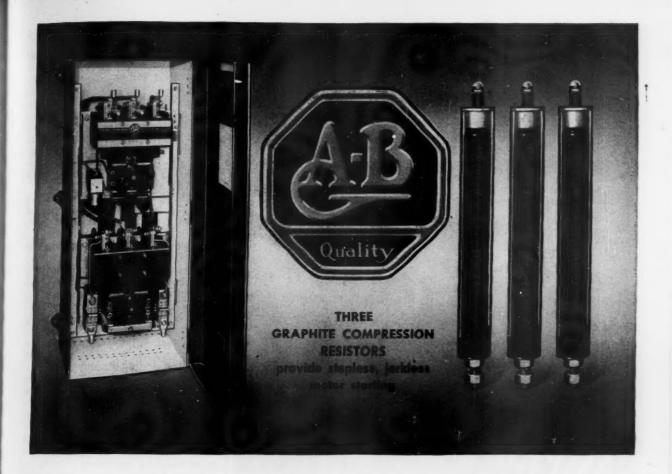
Last week they told about their answer to the problem-the Dehmel Electronic Flight Simulator. Developed by Curtiss-Wright under the direction of Dr. R. C. Dehmel, the device can duplicate exactly, on the ground, the flight performance of an airplane.

Pan Am's version reproduces in exact detail the cockpit of a Stratocruiser (picture, above). All instruments and controls work just as in the real plane. All

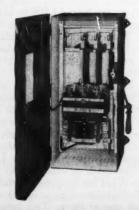
radio navigation beams and landing aids are duplicated. Any weather condition can be produced at will from controls outside the cockpit-and will register on the instruments just as it would in a real plane. The same is true of anything that can go wrong with a plane in flight -fire, wing icing, high-speed stalls. (Along this line, the device can go much farther than would be safe in a real plane.) Engine noise and the "feel" of the controls are just like real flight.

All this is accomplished by a roomful of complex electronic controls.

Pan Am expects to save plenty of money by using the device-despite its original cost of about \$200,000. The airline figures the direct cost of training 70 flight crews on real planes at more than \$700,000. It expects to save more than half of that (final training must still be given in a real plane). Furthermore, chance of an accident during training is cut-and a Stratocruiser costs about \$1-million.



Quality Resistance Starters FOR CUSHIONED MOTOR ACCELERATION



Bulletin 640 Manual Resistance Starter with hand lever control. Upper illustration shows a Bulletin 740 Automatic Resistance Starter. Thesestarters save maintenance and increase the life of your equipment. Some loads . . . like spinning frames, chain drives, line shafts . . . need a gradual, velvet-smooth starv.

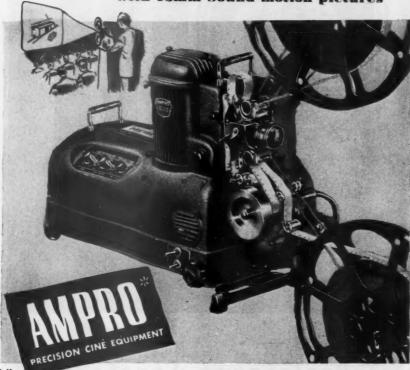
For those jobs, an Allen-Bradley resistance starter .:: either manual or automatic...with its three graphite compression resistors will speed up the motor from standstill to full speed ...without jerk or jolt. No other kind or make of squirrel-cage motor starter can offer such velvet-smooth acceleration. Let us send you Bulletins 640—740.

Allen-Bradley Co.
1332 S. Second St., Milwaukee 4, Wis.

SOLENOID MOTOR CONTROL

they'll understand more... ...remember longer

with 16mm Sound motion pictures



20 YEARS OF EXPERIENCE IS BUILT INTO EVERY AMPRO PROJECTOR

If you are considering equipment for your audio-visual program—here are a few thoughts to consider: A l6mm. sound projector is subjected to the heat of the projection lamp, continuous high-speed movement of the intermittent mechanism, and every action requires split-second accuracy. It must deliver steady, quality projection continuously and quietly. It must be dependable, easy to thread and operate. It must be gentle to precious film and easy to service.



Amprosiide Model "30-D" for filmstrips and 2" x 2" slides Offers extra brilliant illumination, split-second interchangeability from slides to filmstrips and back—simplified, quick threading for filmstrips—and simpler focusing, operating and cleaning.

For these reasons—a good sound projector design must be a tested design. It is only by studying and learning from millions of performances under all conditions that a truly efficient sound projector is developed. Ampro 16mm. projectors have been "put through the mill" by this country's leading school systems, universities and government departments. Into each Ampro projector is built 20 years of experience that assures better performance and longer service. Before choosing your 16mm. sound projector, ask your Ampro dealer for a demonstration of the latest Ampro "Premier-20." Look—listem—remember Ampro's record—and then decide!

Send for FREE Circular
on Ampro "Premier-20" giving full specifications
and prices and name of nearest Ampro dealer.
If you are interested in sound motion pictures
send 10c for 16-page booklet, "The Amazing
Story of 16mm. Sound Motion Pictures." It
dramatically illustrates the various steps in the recording and reproducing of sound on film.

AMPRO CORPORATION, 2835 N. Western Ave., Chicage 18, Ill.
Please send me free circular giving full details about the
Amprosound "Premier-20" Projector.
I enclose 10c | for a copy of the Illustrated booklet, "The
Amazing Story of 16mm. Sound Motion Pictures."
| am also interested in:
| Amproslide Model "30-D" Projector.

☐ vmbiosings woder 2	O-D Fiolecion.	
NAME		
ADDRESS		
CITY	STATE	
		BW548

to 15% of a smaller gross before the war.

Other expenses have risen, too. Many agencies have added skilled personnel men to their staffs as "counsellors" to handle the better-paying openings.

• Net Percentage Down—As a result, some agencies claim that their net today is a smaller percentage of gross than it was during the depression. One executive says that his net varies between 6% and 11% on the gross, which is now running at an annual rate of \$200,000.

Balancing higher costs are higher fees—and the fact that there's plenty of business. New York agencies, at least, aren't complaining.

• Employer Demands—Right now, as the labor market is loosening slightly, employers' demands are tightening. For one thing, companies are insisting that prospective employees have more education. For another, many employers are balking at the salaries demanded by upper-bracket personnel. Some agencies say that, in the last few weeks, salaries offered in the \$10,000-\$25,000-range have decreased nearly 10%.

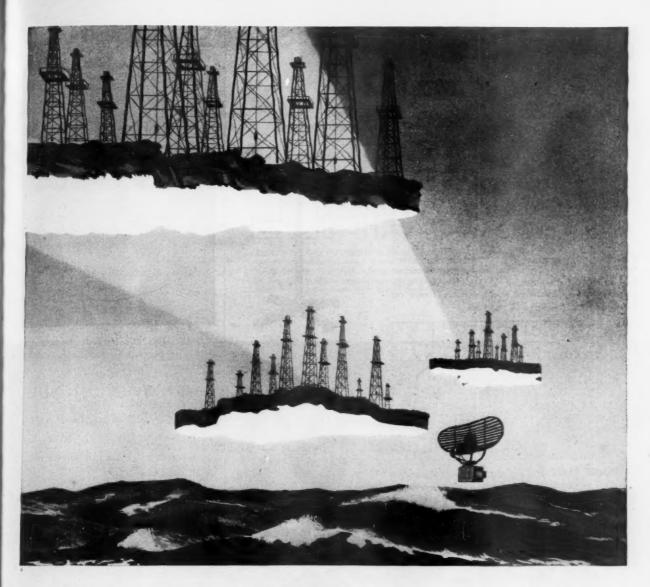
The private agencies all agree that the state employment services, which have taken over the U.S. Employment Service function, have not hurt their business. Most employers would rather deal with the private agencies, and agency heads say that state offices don't go in much for counsellors.

• Sample Operation—Here's how a sample agency works on the job: Cadillac, one of the most aggressive Chicago agencies, sends out as many as 10 jobhunting bulletins a month, each listing about 20 available workers. The bulletins go to about 15,000 employers all over the country. A typical recent bulletin listed 24 technical men-engineers, plant managers, supervisors; salary requirements ranged from \$4,500 to \$15,-000 a year. That bulletin pulled in 85 responses; many asked further details about the applicants. To these inquiries, Cadillac sends detailed abstracts of their qualifications.

Lately, in addition to classified ads, Cadillac has been using display space on financial pages of newspapers to attract executive-type applicants for job openings. If it doesn't find what it wants in Chicago, Cadillac will advertise the openings in New York, Los Angeles, Cleveland, or other cities.

• Typical—What has happened to many agencies is highlighted by a recent experience of one of them. This agency placed the same man in a job for the third time in 30 years. The first job was that of an office boy; the latest was as vice-president of a large company.

The agency men say: "Agencies have always had a recognized position with employees; now they have it with employers."



Oil moves on a RADAR beam...

- Speeding oil from the fields to Esso refineries is another new job for Sperry radar. Today's high-speed tankers literally move on a radar beam that sees through mist and fog...all to help get cargos delivered safely and on time.
- In equipping twenty-one 16,600 ton tankers of the ESSO PARKERS-BURG class with Sperry radar, Standard Oil Company (New Jersey) is taking another step in its billion-dollar expansion program . . . a program designed to help meet the demands of industry, national defense, agriculture, homes and transportation for more and more oil.
- Sperry radar helps an ESSO PARKERSBURG class tanker move 138,355 barrels of oil with a minimum of delay—despite weather conditions. By meeting estimated arrival times, discharging facilities can be scheduled to provide the shortest possible "turnaround" time.
- Shipmasters find that Sperry radar complements their officers' skill in
- open water... their pilots' skill in close-harbor operation. Sperry's 12inch scope and various range scales provide sharper, clearer "high resolution" indications of every detail far at sea or close to shore.
- These and other features are backed by Sperry service facilities. Our Marine Department will gladly tell you about them.



SPERRY GYROSCOPE COMPANY

DIVISION OF THE SPERRY CORPORATION . GREAT NECK, N.Y.

NEW YORK • CLEVELAND • NEW ORLEANS • LOS ANGELES • SAN FRANCISCO • SEATTLE
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COOL workers come through!



YOUR OFFICE GIRLS stay on the beam when there's no heat to hamper their headwork. Watch how a well-placed R & M Air Circulator works wonders. Keeps 'em beautiful, better humored . . . and busy!



YOUR SHOP HANDS give you a bigger day's work when there are no beads on their brows. Get the jump on "summer slump" with those bargains in boosted hot-weather output — R & M Exhaust Fans.



YOUR EXECUTIVES, TOO, stay hot on the job when they're comfortably cool under the collar. For front-office men, there's nothing finer than a handsome, quiet R & M De Luxe Fan.



In 24" and 30" blades for ceiling, floor, wall, or bench mounting. From \$91.20, list.



In 12",16",20",24", and 30" blades for high- or low-speed operation. From \$40.65, list.



In 10", 12", and 16" blades for desk or wall mounting. Oscillating. From \$24.35, list.



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STEEL



COMPLAINANT Herbert Johnson of J. & L. is key man in steel company's . . .

Gray Market Suit

Jones & Laughlin, Ford join hands to trap alleged operators J: & L. sues for damages to reputation.

Ever since the war's end, a gray market has fattened on a shortage of steel. In some cases, it has driven prices up to as much as 10 times regular mill prices (BW-May3'47,p46). But until last month the gray market was as shadowy as a ghost; everybody knew if was there but nobody could ever focus a spotlight on it.

• Joint Operation—Two big companies claim that in April they finally fastened their beam smack on the technique of gray market operating. The companies who did the joint job are Jones & Laughlin Steel Corp. and the Ford Motor Co.

Result: This week the steel company filed suit in Detroit against a Harry C. Edwards and in Chicago against a Howard Kimble. It asked that the two men be enjoined (1) from claiming that they could get steel from J. &. L. to sell above market prices; and (2) from claiming a business relationship with the steel company. It also seeks damages of \$100,000.

• Light—The deposition filed with the

• Light—The deposition filed with the bill of complaint throws a flood of light on how a gray market operates. Herbert Johnson (picture, above), assistant to the J. & L. vice-president in charge of sales, filed the deposition. In it he tells the story of how the two com-

AN ACHIEVEMENT IN MODERN DESIGN.

The Clary Adding Machine justifies the praise it is receiving from thousands of business men and women. Never before has an adding machine introduced so many new and outstanding features for greater speed and greater accuracy. Clary is first with rotary motion. First with rotary printing dials. First with the exclusive Thumb Add-Bar. Twin total bars. The Million-Dollar Key. Two-tone eye-saving molded keys. Fully automatic control bars. In fact, Clary advantages set a new standard in an old industry.

See for yourself what the Clary advantages can do for you. There's a Clary Representative ready to demonstrate all features of the Clary Adding Machine. Call him today for a demonstration of the world's finest adding machine...the Clary Speed-o-lectric.

Backed by factory-supervised service.

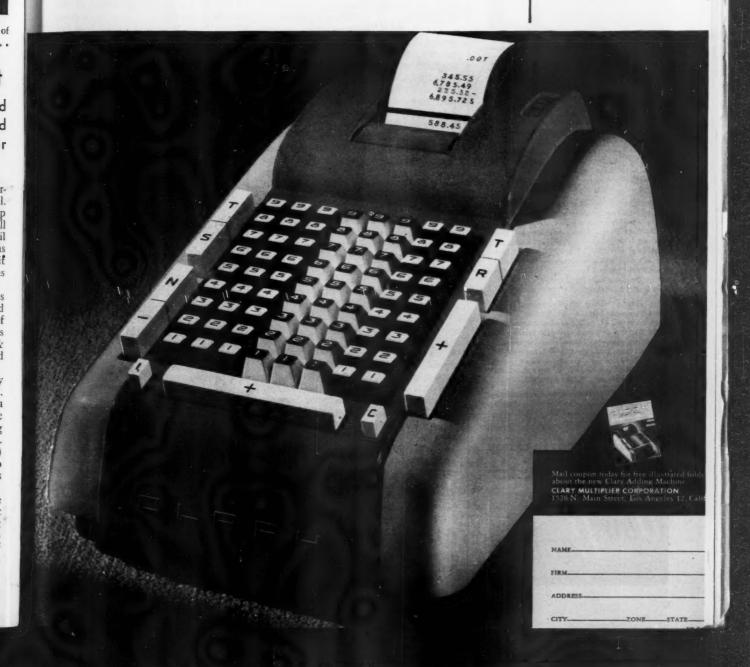


CLARY MULTIPLIER CORPORATION, Main Office and Factory 1526 North Main Street, Los Angeles 12, California.

SALES OFFICES: Clary Factory Branch Offices or Dealers are located in principal cities. If our representative is not listed in your phone book, write or wire for his address.

Clary

ADDS
SUBTRACTS
MULTIPLIES





Ford Uses Silicone Grease in Bearings at 700° F.



PHOTO COURTESY FORD MOTOR COMPANY

We all profit by more continuous operation. Frequently, however, continuous production involves operating at temperatures above the limits of organic greases. In such cases, frequent relubrication, high maintenance costs, and production stoppages were inevitable until our engineers developed silicone greases serviceable at abnormally high temperatures.

The economy of this new solution to high temperature lubrication problems is demonstrated in the core oven conveyor systems operated by the Ford Motor Company. These core ovens operate 16 hours a day, 5 days a week, at a peak heat of 700° F. The 7200 trolley bearings are exposed to such temperatures for 2½ hours out of every 4 hours. Even with automatic oilling, the bearings froze, wheels were flattened, and production was interrupted.

After careful testing, Ford's chemical engineers recommended DC 41 Silicone Grease. Since using DC 41, Ford's production men have found that the core oven conveyor systems start easily, run continuously and require considerably less power to operate. Replacement and maintenance costs are greatly reduced and the bearings exposed to 700° F. are relubricated only once a week.

If you have a high temperature or permanent lubrication problem, write for Dow Corning Silicone Grease data sheet No. G 7-2 or call our nearest branch office.

DOW CORNING CORPORATION MIDLAND, MICHIGAN

New York • Chicago • Cleveland • Les Angeles Terente • Lendon • Paris • Stockholm • Oslo



panies turned detective to nail the alleged gray marketeers:

In March, Edwards telephoned Laurence A. Trefry, steel buyer for Ford for the last 35 years. Edwards told Trefry that he could get steel for Ford, and arranged a meeting in a Chicago hotel on Mar. 30 and 31.

hotel on Mar. 30 and 31.
• 7,500 Tons a Month—At that session, a price of \$79 a ton was reportedly asked for steel ingots whose published mill price was \$36 at that time. According to the deposition, the Ford representative was told that J. & L. would supply the company with 7,500 tons of ingots per month at that price.

The Ford representative stalled. He told Edwards and Kimble that the deal was too big and unusual without first taking it up with others at Ford.

• Plot-After the meeting, Ford claims, it reported the offer to J. & L. The steel company sent Herbert Johnson to Detroit for the next meeting, reportedly held on Apr. 12 at Edwards' offices.

The J. & L. representative accompanied Trefry to the meeting. He was introduced only as Mr. Johnson; the defendants apparently assumed that he was connected with Ford. The deposition says that at this meeting the \$79 price was cut to \$75 a ton for the steel ingots. By that time the mill price had climbed to \$42.80.

• The Terms-According to the bills of complaint, Edwards insisted that purchase orders should be made out directly to Jones & Laughlin, "stipulating that the prevailing mill price is to apply for a quantity of 7,500 tons of ingots per month." Ford would then give Edwards a letter of intent providing for payment to Irving Trust Co. or any other bank of the difference between the mill price and \$75 per ton.

At this point, according to the complaint, Johnson asked: "Who gets the \$32?" Said Edwards: "All I get is \$1 a ton. I am not at liberty to tell you [now] who the people are who get the rest." He added that after the deal went through he would tell them.

"The Right Man"—Johnson sug-

• "The Right Man"—Johnson suggested that Trefry probably knew more people at J. & L. than Kimbel did, and that, therefore, he should be able to get such an order accepted himself. Said Kimble, according to the deposition: "You have to know the right man."

Then Johnson said: "We still don't understand how it is that if no one else can get ingots, you fellows have 7,500 tons a month to sell Ford." Said Kimble: "It's very simple. Some of the top officials are being paid off in cash."

top officials are being paid off in cash."
"Do you mean some of the officials at Jones & Laughlin?" Johnson asked.
"I did not say that," was Kimble's answer.

• Billets, Too-In the conversation reported, Edwards also offered to get Ford 30,000 tons of steel billets. Kimble was reported as saying that they could get rolling time for ingots not only at Jones & Laughlin but also at Bethlehem Steel Corp.

Johnson's deposition claims that I d-wards and Kimble have made statements about J. & L. dealing in the gray market to various other persons. It claims that these statements are false, and that they have damaged J. & L.'s reputation.

• Argument—Perhaps their strongest argument on the point: J. & L. hasn't sold steel ingots for years to anybody.

NEW COLD-ROLLING MILL

A new type of cold-rolling mill that boosts production of steel strip and cuts its cost was announced last week by Cold Metal Products Co. of Youngstown, Ohio. On thin strip, according to W. B. Lockwood, president of the company, the new mill gives from three to ten times the production that can be obtained from a Steckel mill (the conventional type most used today). In addition, according to Lockport, there is much less breaking of the strip.

The essential difference between the new mill and present types lies in the way power to move the steel through



BUILDING AID

This portable elevator saves valuable scaffolding and elevator-building time for the Richardson Construction Co. of Ft. Lauderdale, Fla. Mounted on a truck, the elevator can be raised to its full height of 40 ft., and made ready for use, in less than an hour. When not in use, the hoist folds down over the truck. Powered by an 8-hp. motor, the elevator can lift a load of up to 700 lb, to the height of a four-story building. The device was developed by John E. Ekman of Ft. Lauderdale.

NOW ... AGRICULTURAL CHEMICALS

from a basic producer PITTSBURGH COKE AND CHEMICAL COMPANY Announces the Organization of AGRICULTURAL CHEMICAL COMPANY PITTSBURGH for the Sale of AGRICULTURAL CHEMICALS Executive Offices: Empire State Building 350 Fifth Avenue New York 1, N.Y.

This affiliation makes available for the first time a source of synthetic organic agricultural chemicals in form suitable for application . . . produced by one manufacturer and controlled in each stage of processing from the lump of coal to the ready-to-package product.

For many years a producer of coal-chemicals, Pittsburgh Coke and Chemical Company has more recently been converting these basic organic materials into a number of the new chemicals which are rapidly supplanting inorganic chemicals and botanicals in agriculture. To this manufacturing source the affiliation of Pittsburgh Agricultural Chemical Company adds plant pathologists, entomologists, agronomists and chemists trained in the researching, formulation and marketing of agricultural chemicals. A wide variety of insecticides, fungicides, rodenticides and germicides will result . . . all manufactured, formulated, tested and shipped from the Neville Island plant.

Your inquiries are invited. Please address them to the New York office of



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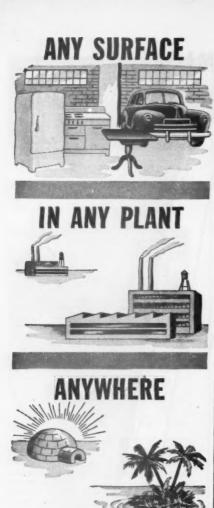
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COAL CHEMICALS . ACTIVATED CARBON . NEVILLE COKE . EMERALD COAL . PIG IRON . GREEN BAG CEMENT . CONCRETE PIPE AND CONCRETE PRODUCTS . LIMESTONE PRODUCTS



Can be coated with Highest Quality Finishes from a single source— SHERWIN-WILLIAMS

Walls, equipment, products—no matter what it is you need painted, no matter what conditions are prevalent in your plant (such as humidity, heat, fumes)...no matter where you are located—you can obtain the highest quality finishes specifically developed to do a superlative job, from one source... Sherwin-Williams.

Investigate now the advantages, the economy of dealing with the world's largest paint manufacturer. The Sherwin-Williams Co., Industrial Division,

dustrial Division, Cleveland I, Ohio.
(Export Division, Newark, N. J.)
Products of Sherwin-Williams Industrial Research

SHERWIN-WILLIAMS INDUSTRIAL FINISHES the rolls is applied. Two methods are used today-and both have disadvan-

tages:

(1) The driving power is applied directly to the work rolls. (The ones that come in contact with the strip to squeeze it down.) But to produce quality strip these rolls have to be relatively small in diameter. That limits the amount of power that can be applied.

(2) The power is applied through the reels on which the strip is wound. But this means that the strip is pulled through the rolls; therefore, the strip

often breaks.

The new mill is four high; that is, it has four rolls—two small ones that roll the steel and two large ones called backing rolls. The driving power is applied to the backing rolls, and transferred by them to the small work rolls.

A 10-in. model of the new mill has been tested successfully for the past year; a larger unit is now being planned. Cold Metal Products will make and sell the mills; it will also license other manufacturers to make them as soon as the patents that have been applied for are granted.

Ford's Oxygen

Auto company will make its own for use in steel mills and welding departments instead of buying from outside producers.

Manufacture of oxygen by large consumers for their own use has had its ups and downs. For many years the tendency has been to buy the gas from specialized producers. But recently the trend has turned. Ford Motor Co. emphasized the shift this week by moving to get into the oxygen-making business for itself.

Ford will have four oxygen units at its River Rouge plant. They will be capable of producing 23 tons of oxygena day—just about actual requirements—and, as a byproduct, 75 tons of nitrogen daily. The system will also include storage facilities for about 200 tons of oxygen, held under 2,200 lb. pressure, for release at peak-load periods.

• Use—Most of the oxygen will go to Ford's steel mills—but not for the production of basic steel. It will be used to scarf hot blooms, billets, and slabs. (Scarfing is defined as "the removal of seams and other surface defects by cutting with a torch.") The oxygen will also be used in welding—principally of auto body sections.

The byproduct, nitrogen, will be used in several ways. Among them: shrinkfitting of inserts, controlled atmospheres for heat-treating operations, blanketing of inflammable-liquid storage tanks, spray painting.

• Builder—The plant will be built for Ford—and operated for a while—by Air Products, Inc., of Allentown, Pa. It is one of the smaller producers in a field largely dominated by Linde Air Products Co. (a subsidiary of Union Carbide & Carbon Corp.) and Air Reduction Co., Inc. Air Products got into this field during the war, when it built portable gas plants for use by troops far from normal supply points. Since the war ended it has built a number of oxygen plants for steel producers; it is now building one with a daily capacity of 400 tons for Weirton Steel.

• Pros and Cons—There are good reasons both for and against having an oxygen plant at the point of use. The best reason for doing so is the prospect of reduced costs. Distribution cost runs high on oxygen; a user with his own facility can avoid this expense. Ford's engineering people took this view.

The prime reason against relying on a plant at the point of use is the possibility of breakdown and consequent helplessness. Ford production officials worried about this, but they argued in vain against the engineering people.



WELDING REPLACES SOLDER

Elwell-Parker Electric Co., Cleveland, has quit soldering connections in electric motors for the factory trucks it makes. Instead, it uses the costlier method of arc welding. The company says it made the switch because solder softens and melts when motors get hot—causing breakdowns. Temperature during the welding operation is controlled by applying a jet of water on the copper parts. As many as 65 welds may be made on a small, three-to-five-hp. motor.

The proof of value is the Pedigree

Air

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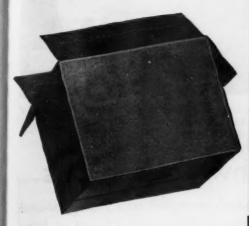
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In boxes, Too!





PROOF OF Quality
PROOF OF Service
PROOF OF Fair Price

A box with a pedigree? Yes, you can trace a Union 100% Kraft corrugated container all the way back to Union's own forests. Every step in manufacture, from tree to finished box, is quality-controlled by one responsible management, operators of the largest Kraft pulp-to-container mill in the world.

And more than that: For more than 75 years Union has been the leader in paper packaging, producing specification bags for hundreds of industries.

The same skill in production, the same vast forest resources and mass production economies which have put Union at the top in paper packaging have also built a containerboard business which last year accounted for nearly 6% of America's total tonnage of Kraft boxes.

Today Union's board is going into corrugated containers bearing the pedigree mark of the famous Union shield. This emblem identifies an organization which, for three quarters of a century, has been fully conscious of its responsibilities to customers who must depend on the reliability of their container source for the continued operation of their own plants.

UNION Corrugated Containers

UNION BAG & PAPER CORPORATION

Principal Offices in WOOLWORTH BLDG., NEW YORK 7, N. Y.





Corrugated Container Plants:

SAVANNAH, GA. • CHICAGO, ILL. • TRENTON, N. J. • JAMESTOWN, N. C. (Highland Container Co., Inc.)



Today there are thousands of rural men and women who seek permanent employment in North Carolina's new and expanded industries.

Manually operated farm equipment is giving way to mechanized, labor saving methods. While tractorized farming increased by nearly 250 per cent during a recent five-year period, 259,000 Tarheels left the farm on their own initiative to find new channels for their productive talents . . thousands of others continued to live in their farm residences, while employed in nearby towns. Authorities estimate that 54 per cent of today's North Carolina farm boys seek opportunity off the farm. Result . . . native born Tarheels have been on hand to man every new job created during post war years of record-breaking expansion. Thousands of other capable, work - accus-tomed men and women remain in the growing labor reserve, ready and able to help your plans for industrial expansion succeed.

Write Div. MI-15 Department of Conservation and Development, Raleigh, North Carolina, for information covering your requirements.



TRANSPORTATION



SPEAKERS at Highway Transportation Congress included (left to right): E. J. Thomas of Goodyear; Albert Bradley of General Motors, new congress chairman; Alexander Fraser of Shell Union Oil; and Alfred P. Sloan of General Motors, outgoing chairman

Studying Highway Problems

Rehabilitating the nation's roads will take years, National Highway Users Conference reports. States urged to set up long-range programs. Diversion of highway revenues attacked.

American business will have to struggle along for several years with a continuing shortage of highways. There are no problems that cannot be solved in time, but relief must come gradually—in tune with sound, long-range plans that fit the nation's purse.

That's how the situation looked to the Second Highway Transportation Congress of the National Highway Users Conference. Members went home last week from the Washington meeting with this conviction: In an expanding economy that encourages constant change and development, highway improvements can never catch up with needs; nevertheless, growing pains will be eased in the next ten years.

• Inflation Danger—The war setback in highway construction cannot be made up with any speed. Last year's contract awards of \$1.1-billion took as much of the available supplies of manpower and materials as the economy could stand without further boosts in prizes and costs. The congress agreed that highway departments deserve praise for holding back on high-price contract awards to resist inflation.

Construction needed on the federalaid highway system alone totals \$22billion for 42 states, G. Donald Kennedy, vice-president of the Automotive Safety Foundation, told the congress. Maintenance costs have risen steadily, influenced to an appreciable degree by war stoppage of new construction.

• Planning Urged—The conference recommended that each state develop a long-range highway program of its own, based on a comprehensive study of its needs. Two states, California and Michigan, already have shown the way.

Each study, the congress stipulated, should have the guidance of an advisory board created by the state legislature; it should be made up of members from the legislature, highway-user groups (both rural and urban), and official and public bodies. The program in each state should include full plans for construction, financing, and administration. Further, it should set up a continuing authority to meet changing needs.

These long-range plans should establish balanced schedules for improvement of rural roads, of highways on the nation's 40,000-mile interstate system,

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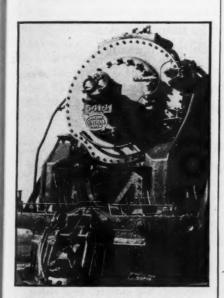
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and of traffic routes in congested urban areas. The conference particularly urged speed in the development of the interstate system. Arthur M. Hill, chairman of the national security resources board, told the congress that the existing system might not be able to carry the load in a real emergency

• Against Federal Control-The conference still feels strongly that control of highways should remain with the states. Federal aid, it says, should continue to be spent by the states under competent federal supervision. This aid should be limited to grants which benefit the national economy; further, it should come from general revenues and not from special federal taxation. The congress urged repeal of wartime excise taxes on vehicles.

Diversion of highway revenues was strongly condemned. The conference would like to see federal highway legislation amended to withhold federal aid from any state which spends tax money from highway-users for nonhighway purposes. The conference also took a strong stand against toll roads; it recommended amendment of the federal highway act to shut out toll roads from the federal-aid system.

• Trucking Problems-Restrictions on interstate trucking got a lot of atten-



NEW LOCOMOTIVE LIGHTS

Sealed-beam headlights, long a feature of automobiles, have worked their way into the railroads. The New York Central is trying them out on one of its large passenger locomotives. Because the light beam is focused from a small reflector area, two lights take the place of the traditional one. One advantage of the dual model, the Central says, is that if one bulb goes out, the other would provide emergency light. The pair costs about the same as one of the old one-eyed cyclops models.

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A report on the most useful year

In this country and through the world, human progress calls for more and more oil. To do their part in meeting the great need for oil in 1947, Standard Oil Company (New Jersey) and its affiliates performed the biggest job in their history. They produced more oil and delivered more products; took in and paid out more money; employed more workers and served more people than ever before. And far more than ever was spent for facilities to meet growing needs – 426 million dollars in a single year, paid for out of past and current earnings of the business. It was a year of great accomplishment; great progress. Here are some highlights from this significant year, based on the Company's Annual Report to its 171,000 stockholders...

1 World-wide, the need for oil surpassed all records. To help meet the need, crude oil production by Jersey Company affiliates was increased 8% over 1946, setting another new record. Their production was 14% of the world's total for the year.

In the U.S., too, the need was at record levels. Three million more cars to fuel than pre-war; twice as many tractors and trucks on farms; a million and a half more oil-heated homes; five times as many diesel locomotives. Total U.S. consumption of oil products was 11% greater than 1946, 12% greater even than the peak war year. In meeting this need, we set new output records month after month, accounting for 9% of U.S. total crude oil.

3 The unusually hard winter made heating oil and kerosene supply a special problem. By extraordinary effort in refineries and hard work and long hours by people all along the line, we were able to deliver about 25% more of these products than in the winter before.

4 With such big demand, big supply, and rising prices, money came in—and was paid out—in all-time record figures. Total dollar income reached \$2,387,000,000—45% over 1946. Operating charges and other deductions from income reached \$2,118,040,000—44% over 1946. A record sum of \$466,954,000 was paid to our employees.

STANDARD OIL COMPANY

AND AFFILIATED

biggest, hardest, we ever had!...

5 Net consolidated earnings of the Company and affiliates — \$269,000,000 — equalled \$9.83 per share, or 11.3% of total income as compared to 10.8% in 1946. Dividends of \$4.00 per share were paid by the parent Company.

6 Most important dollar figure of the year was the 426 million dollars spent for new wells, plants, tankers, pipelines and all the other things it takes to get the oil you need. Part of a billion dollar program covering the two years 1947-48, it was by far the greatest capital investment we have ever faced. The money came almost entirely from earnings, past and current — money made on the job went back into the job.

7 Transportation of oil was a big job. During the year, we bought 23 ocean-going tankers from the U.S. Maritime Commission, and early this year we ordered 6 new 26,000-ton, 16-knot ships, the largest we ever operated. Pipelines were pushed to new records—our trunk lines delivering 83 billion barrel-miles, or 11 billion more than in 1946.

8 In discovering new oil, we spent 5 times as much as pre-war—16% more than last year. (Altogether, the country's known oil reserves were increased by 600 million barrels during the year, in spite of record consumption.)

9 Cost of research also increased — \$18,200,000 was spent for new knowledge. Considerable progress was made in finding more efficient and

lower-cost processes for making gasoline and other liquid fuels synthetically from natural gas, oil shale, and coal.

10 Labor-management relations remained excellent, continuing our exceptional record of industrial harmony. Employee compensation was adjusted upward during the year to help meet rising living costs. A total of \$55,396,000 was saved in employee Thrift Plans, of which \$20,987,000 was saved by employees and \$34,409,000 contributed by the Company and its affiliates.

HE 1947 JOB WAS A BIG ONE. The jobs ahead are bigger still. In a democracy the responsibility for making a better world rests with the individual and the individual enterprise. It is clear that an enterprise like Standard Oil Company (New Jersey) must exercise a full realization of the social responsibilities of profit-must understand that the peace, advancement, and the security of the people of the world are the best guarantee of the Company's own progress and security. We intend now, as always, to demonstrate in action that the free, competitive American enterprise system is far superior to any other. We believe that the Company and its affiliates are so organized, and their business so conducted, that they will continue to serve people well.

(NEW JERSEY)

COMPANIES

Copies of the full report are available on request. Address Room 1626, 30 Rockefeller Plaza, New York 20, N. Y. The earnings statement in this report satisfies the provisions of Section 11 (A) of the Securities Act of 1933.



- Motor Driven Slide Adjustment by thousandths of an inch. Slide easily operated parallel or non-parallel with base. Slide ways provide full bearing with housing in all slide positions.
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120 tons capacity—will form mild steel 7/16" \times 4 ft., 5/16" \times 6 ft., 1/4" \times 8 ft., or 3/16" \times 10 ft. at 30 strokes a minute. Write for Bulletin 106A.

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tion. L. C. Allman, vice-president of Fruehauf Trailer Co., called for a scientific approach to size and weight limitations. Modern roads, he said, will carry heavier gross loads, if properly distributed, than are now permitted.

distributed, than are now permitted.

The conference decided that more information is still needed before standardized height and weight limits can be set up. But it did make three recommendations:

(1) Size and weight limits of the American Assn. of State Highway Officials should be established as minimum, not maximum, values;

(2) State legislatures should boost the width limit from the present 96 in. to 102 in. (for highways at least 20 ft. wide).

(3) The legislatures and A.A.S.H.O. should set a height limit of 13½ ft.

• City Traffic Problem—Urban congestion (BW—Mar.27'48,p34) exacts a beavy toll from business, John V. Lawrence, managing director of American Trucking Assns., Inc., told the congress. Expressways do not solve the problem, he said; it can be corrected only by improving ways of getting freight into and out of buildings. Where adequate shipping facilities cannot be built economically, many companies have already moved to outlying areas.

Congestion in their buildings is costing businessmen money, he emphasized; they must do something about it before they price themselves out of their present locations or even out of their markets.

A broad range of groups are represented in the conference. The classifications include farmers, private-car owners, truckers, bus operators, and manufacturers of vehicles, fuel, and tires. Delegations from more than 40 states took part in the congress.

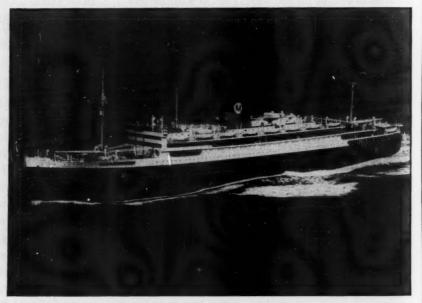
ICC Challenged

On-the-farm preparation of produce for sale doesn't make it manufactured, farmers argue; fear blow to prepackaging.

When is a tomato—or an apple, or spinach—"manufactured" and when isn't it? The Dept. of Agriculture, plus a score of fruit and vegetable associations from California to Florida, are gnawing at that riddle.

• Exempt or Not-The question arose out of an Interstate Commerce Commission ruling last fall. And it has come up again. The Agriculture Dept. and fruit and vegetable men joined hands last week to get ICC to reverse its decision.

Agriculture says that the decision (in the so-called Harwood case) puts under



S. S. Brazil Rejoins Merchant Fleet

The S. S. Brazil, third largest ship of the U. S. merchant fleet, was headed for blue water this week—back in bright peacetime dress after a long tour of duty as a wartime troopship. Flying the house flag of Moore McCormack Lines, she was on her way to the West Indies. The ship will enter

the South American run in June. The Brazil was reconverted in the Brooklyn yard of Atlantic Basin Iron Works, a subsidiary of Blair Holdings Corp. (BW-Mar.13'48,p32). Cost: some \$9-million. She is next to the last of the 20 passenger liner reconversions for the Maritime Corumission.

iCC regulation all truckers who haul ruits and vegetables that have been washed, cleaned, and packaged in bags or boxes before being transported.

Before that decision, all such items had been considered exempt from ICC rules. A section of the Interstate Commerce Act specifically exempts trucks hauling agricultural commodities. But and here's the rub-this same section says that manufactured products of agricultural commodities aren't exempt.

This is the part that ICC applied last fall when it gave a trucker a permit to haul washed and packaged spinach, kale, and the like. ICC decided these agricultural commodities had become 'manufactured." That meant they were subject to ICC's rules, rates, and route regulations just like any other

trucked goods.

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• Impact-The decision hit hard the fast-growing trend of prepackaging fresh vegetables-that is, of marketing tomatoes, potatoes, spinach, salad vegetables in consumer-sized bags or boxes. The Dept. of Agriculture and trade associations have been helping the trend along with research projects set up to spread prepackaging of truck crops.

Hence the petition that ICC reopen the Harwood case. More than that, the petitioners would like a showdown. Object: to find out exactly where ICC stands on what's manufactured and what isn't, in food products. Fruit and vegetable men think such a showdown would be much better than what they call ICC's "nibbling" away at the agricultural exemption until it loses most of its point.

• Broad Coverage-Dept. of Agriculture lawyers, in their petition to ICC, claim that ICC's offhand decision in the Harwood case is "so precedent-making ... that it affects the movement of nearly all agricultural commodities on which some labor is performed, or mechanical skill is applied, prior to their transportation."

For instance, says Agriculture, it hits "frozen fruits, vegetables, and seafoods, dyed oranges, defuzzed peaches, dressed poultry, shucked oysters, beheaded shrimp, fish which have been filleted, lobsters, shelled and unshelled peanuts, pecans and walnuts, pitted cher-

ries, and polished fruit, etc."
• Reversal?-ICC has a quick out: One of its lower divisions made the Harwood decision. That would make it relatively easy for the commissioners to

review the finding, and maybe reverse it. If ICC sticks to its guns, then look for an all-out ruckus. Farm organizations and farm bloc congressmen would be in on the scrap-all blasting away at the "bureaucrats" in ICC. Even if ICC does a turnabout in the Harwood case, the farm groups may press ahead for a big hearing to settle once and for all what's manufactured and what isn't.







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HEALTH IN INDUSTRY

State Sickness Benefits

Gov. Driscoll finally pushes through program in New Jersey. State is third to adopt plan to pay industrial workers when ill. Employees can choose state-run or private insurance.

Sick workers generally find that pain and discomfort are only one part of their worries; money is the other. For many of them, weekly pay stops—while medical expenses pile up. Health and hospitalization insurance helps somewhat—but so far relatively few of these policies try to offset lost wages.

For more than ten years, organized workers have been urging federal or state governments to sponsor sickness-benefit programs. Their argument: Workers get compensation for lost wages when they have accidents, or when they are "willing and able" to work but can't find jobs; why shouldn't they get aid also when the wages are lost through sickness?

• Third State—Last week, New Jersey became the third state to set up a sickness-benefit program. Legislative aides of Gov. Alfred E. Driscoll shoved through a bill extending the state unemployment compensation law: About 1.6-million workers will become eligible next year for cash sickness and disability benefits of \$9 to \$22 a week for as long as 26 weeks.

Two other states already pay such weekly benefits. Rhode Island pioneered in the field when it adopted a compulsory, state-administered plan in 1942. California chose a radically different type of program in 1946. The New Jersey plan is an adaptation of California's. The two original plans:

Rhode Island's "monopolistic" program puts the state in the disability insurance business. Employers aren't allowed to insure with private companies; a state agency collects sickness-benefit taxes, administers the fund. Some 350,000 workers in the state are covered; benefits range from \$10 to \$20 a week for 23 weeks.

California's "voluntary" program gives the employer a choice between self-insuring, commercial insurance, or state insurance. New Jersey has modified this: The workers themselves can choose; an employer who wants to use commercial insurance must get the approval of a majority of his employees.

• Sharp Differences—Most unions favor the Rhode Island public insurer plan. Management—if it has to come under any form of sickness-benefit program—prefers the California plan.



CHAMPION of sickness-benefit plan: Gov. Driscoll of New Jersey

These differences came out clearly in the New Jersey legislative battle. And you can see them in sharply opposed evaluations of the final compromise program:

Legislative supporters call the sickness-benefit plan "the greatest social advance we have made in a decade."

Labor spokesmen say that, at best, it represents only an "unsteady crawl forward."

Operation—Here's how the plan will

New Jersey will recapture \$50-million in employee contributions to the federal Unemployment Compensation Commission. (States may do this under a 1946 federal enabling act, if they use the funds for sickness pay.) New Jersey legislators estimate that interest on the \$50-million will cover annual claims.

New Jersey employees have been paying a 1% unemployment compensation tax on annual pay up to \$3,000. There has been a tacit agreement that eventually the levy would be used for sickness pay.

• New Arrangements—In the future there will be two different arrangements:

(1) Employees covered by state-administered sickness insurance will con-



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UNITED STATES STEEL

tinue to pay one-fourth of 1% of wages up to \$3,000 a year to UCC; and they will pay three-quarters of 1% into the state sickness fund.

(2) Those covered by private plans will be required by law to pay only the one-quarter of 1% to UCC; the comployer is legally liable for the premium on private insurance—but he may ask employees to contribute three-fourths

of 1% of wages.

If state-administered insurance is chosen, the employer must pay one-fourth of 1% of taxable wages into the sickness-pay fund during the first two years. After that, his contribution will range from one-tenth of 1% to a maximum three-fourths of 1%—the amount will be adjusted on a "merit rate" basis, according to claims paid to his employees.

All workers now covered by the unemployment compensation law will be eligible for sickness pay starting Jan. 1, 1949. Claimants must wait a week before filing, must have a doctor certify that they are too ill to work.

• Driscoll's Fight—The sickness-benefit fund fight started in New Jersey seven years ago, with the A.F.L. behind it. Gov. Driscoll took up the cudgel for a modified program in 1947, but his bill died: A legislative commission, however, was named to draft a plan. It studied the Rhode Island and California experiments before coming up with its ideas. Before adoption, these were amended extensively. The New Jersey group found that California's program, with carefully outlined provisions for benefits, has been on a pay-as-you-go basis for two years. No new taxes were necessary to put it into effect, or to maintain it.

• Rhode Island—Rhode Island's plan, however, has had to be revised several times. Its early experiments almost wrecked it—mainly because enthusiastic sponsors allowed too much latitude. For instance: At first maternity benefits could exceed \$500; workers injured on the job could collect more than 100% of weekly wages through duplication.

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Sickness or disability pay in Rhode Island ranges from \$6.75 to \$18 a week, with a 20-week maximum (10 weeks for pregnancy). Employees pay a 1½% tax on income up to \$3,000 a year (originally, the tax was 1%).

• Voice of Experience—The first five years of Rhode Island's plan were tough ones, but by late 1946 the program was operating smoothly and efficiently.

Rhode Island hands on this advice, culled from its trial-and-error work, to other states:

- (1) Above all, limit maternity payments.
- (2) Limit payments on workmen's compensation cases.(3) Expect payments to salaried

workers to run high; they'll have to be balanced by lower payments elsewhere.

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(4) Expect women to be sicker more often, and longer, than men.

(5) Count on older men and younger women to be the poorest risks.

(6) Bank on the probability that married women will stay off the job longer than single ones after an illness.

Medical Meetings

Congresses report progress against diseases that plague U. S. businessmen's tropical ventures with high costs.

Big business took time out last week for a series of medical meetings in Washington: the "fourth international Congresses on Tropical Medicine & Malaria."

• Business Interest—On the surface, the meetings seemed to hold little interest for businessmen. Yet through the 10-day session—which drew 2,000 persons from 44 countries—representatives of companies with tropical investments sat and listened intently. They followed the higher technical reports on medical research as closely as the scientists, doctors, college professors, pharmaceutical people, and medical missionaries with whom they rubbed shoulders.

These businessmen hoped that the 197 papers read at the congresses would produce solutions for some of the knotty problems that plague their tropical ventures.

• Problems—One of the knottiest: lost man-hours and higher operating costs as a result of tropical diseases that cut down their native workers. A problem with deeper repercussions: the damage these diseases do to world commerce by slowing down the production and the shipping of scarce commodities from such places as the lush East Indies—also lush with tropical disease.

The congresses, first ones held since 1938, provided some of the answers. Because of stepped-up wartime research by the military, the congresses produced more valuable medical data than any of their three predecessors. Delegates and observers came by the hundreds from India, the Arab nations, Indonesia, and other tropical countries. They came from as far north as Finland, from almost every big country but Russia.

• Financial Support—The congresses drew heavily on the financial support of sustaining members. Companies which contributed included Arabian American Oil Co., International Business Machines Corp., Lederle Labora-



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In Iowa you'll find sympathetic government, skilled workers, adequate power and room for expansion. You'll also find a ready market for many kinds of manufactured products. The fabulous Iowa market, always stable, reached a record high in 1947, when

cash farm income averaged \$11,490 per farm and industrial income almost equalled the two and one-third Billions reaped from Iowa's rich fields.



To interested executives this valuable reference book containing a complete picture of industrial opportunity in lowa is available upon request included are vited statistics on population, existing industry, agriculture, raw materials, markets, transportation, and living conditions. Write for your free copy now and see how you can profit by bringing your plant to IOWA! Address 767, Central National Building, Des Moines 9, Iowa!

IOWA DEVELOPMENT COMMISSION



ELECTED PRESIDENT of Medical Congresses: Dr. Leonard Scheele

tories Division of American Cyanamid Co., Pan American Airways Corp., Schering Corp., Socony-Vacuum Oil Co., Standard Oil Co. (New Jersey), United Fruit Co., Youngstown Sheet & Tube Co., Aluminum Co. of America, Sun Life Assurance Co. of Canada, and Tide Water Associated Oil Co.

By the time the last of the 197 papers had been read, the business sponsors decided that their money had

been well invested.

For one thing, they were pleased with the progress made in fighting malaria, which numbers 500-million victims, mostly tropical. (Some 500,000 American servicemen contracted ma-

laria during the war.)

• Malaria Progress—The highlight of the 38 papers given on malaria was one by Dr. H. M. Shortt, director of the department of parasitology of the London (England) School of Hygiene & Tropical Medicine. He reported that he had discovered the "missing link" in the cycle of development of malaria parasites. This link has stumped scientists for 50 years. Through research with both monkeys and a human, Dr. Shortt located this missing link in the liver. The malarial parasites lodge there, he reported, and incubate from the fifth to tenth day in the cycle before entering the blood stream.

This discovery opens up new approaches to the study of malaria medication. Scientists believe that in this previously unknown stage of malaria may lie the cause of relapses.

Several synthetic drugs that came out of wartime research were reported to have proved effective against malaria: pentaquine, isopentaquine, paludrine, choloraquine, sontoquine, and pamaquine. Some of these can't be bought in the open market, but are available in hospitals or through a doctor's prescription.

· "Miracle Drugs"-The congresses also heard reports on such so-called "miracle drugs" as chloromycetin. Experiments in using it against scrub typhus at a U. S. Army test station set up at Kuala Lumpar, Malaya, were re-

Until development of chloromycetin, even typhus vaccine had proved ineffective. Result: This disease had made serious inroads among native Malayan plantation workers, slowing exports of vital commodities.

The experiments showed that the drug cut down duration of fever, the period of hospitalization, and incidence of complication. Some enthusiastic researchers think it might prove just as effective against other diseases.

• Election-Dr. Leonard Scheele, Surgeon General of the U.S. Health Service, was elected president of the congresses. He also headed up the U. S. delegation at the meetings. Next meeting: probably 1958; place, undecided.

NEW TYPE OF PENICILLIN

The dictionary of disease-fighting weapons has a new word: Wycillin, That word joined the list of battlers against pneumonia, venereal diseases, and other bacterial maladies last week.

Wycillin is a new form of injectible penicillin, produced by Wyeth, Inc., Philadelphia drug manufacturer. It has an O.K. from the Food & Drug Administration.

Advantages that Wyeth claims for this type of the drug:

• It can be carried around safely in a

physician's pocket.

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• In water solution, it keeps its potency for seven days without refrigerationwhich other aqueous penicillin prepara-

• Injection causes no pain to the pa-

• It is nontoxic; there's also no danger of embolism because it is suspended in sterile water instead of in oil or oil and

• The affected organism won't build up resistance to this type of penicillin.

Technically, Wycillin is described as crystalline procaine penicillin G for aqueous injection. A shot of it into the muscles of a patient is good for 24 hours. Other forms of penicillin are also effective that long. But Wyeth spokesmen point out that these formssuspended in peanut oil or in oil and wax-often cause the patient considerable discomfort.

The new product costs, unit for unit, about the same as ordinary penicillin. Wyeth reports that 75-billion units are being placed with 10,000 drug establishments.

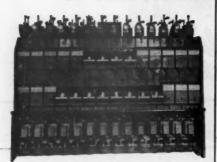


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High Speed Automatic Special Machine for Double Insulating Magnet Wire.

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Black Industries places at your disposal-

- 1. Complete facilities for designing and engineering.
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- 4. The right type of personnel-men skilled in the use of fine machine tools and trained through years of experience to work within the most critical limits.

We have produced special machinery for many nationally known companies, -and we can help you.

Write for illustrated Bulletin.

BLACK INDUSTRIES 1406 E. 222nd St. . Cleveland 17, Ohio



SPECIAL | PRODUCTION

Isotopes Over the Counter

Use of radio-isotopes has been hampered by the need to incorporate the radioactive elements into suitable compounds. Now Tracerlab, Inc., is offering such compounds already made up.

One new tool that doesn't require much selling to a research man is the radio-isotope. Radio-isotopes allow him to "tag" compounds used in processes under study, give him a play-by-play picture of what is going on (BW-Apr.

24'48,p74).

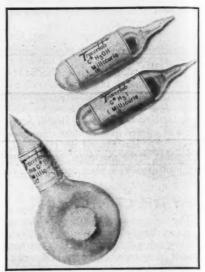
But there has been one drawback to wide use of the new tool: The isotopes available through the Atomic Energy Commission are in element and compound forms not immediately suitable for research use. Consequently, the user must incorporate them chemically into the compound needed for the research job at hand. (Radiocarbon-14, for example, wouldn't be much use to petroleum chemist, but acetylene made from carbon-14 would.)

• Trailblazer-A number of pharmaceutical and chemical plants have been talking with AEC about commercializing the business of synthesizing radioactive compounds. This week, however, one firm was already selling, over the counter, a series of compounds "tagged" with carbon-14 (picture, above). With this move, Tracerlab, Inc., 55 Oliver St., Boston 10 (BW-May3'47,p20) is making business history as the first company to open up a radioactive-com-

pound shop for industry.

Tracerlab has ambitious plans for its new venture. The company expects: (1) to have a variety of tagged compounds suitable for research groups who aren't in a position to make their own; (2) to cut costs, because large-scale manufacture for a lot of customers is cheaper than doing a special job for one (except for materials, the cost of synthesizing a radioactive compound does not increase much with quantity); and (3) to save time in the application of radio-isotopes to industrial problems in research laboratories.

• What's Available-Work is starting with 100 millicuries of carbon-14. (A millicurie is that quantity of a radioactive substance which gives off the same amount of alpha radiation as one milligram of radium.) Tracerlab is already offering barium carbide, acetylene, sodium cyanide, methyl alcohol, and methyl iodide. Several others will be added to the list within the next six months: carboxyl-labeled acetic acid, acetyl chloride, and ethyl acetate; ben-



TINY DETECTIVES: Radioactive compounds help unravel chemical mysteries

zene; methylene-labeled ethyl alcohol and ethyl iodide; and methyl-labeled acetic acid, acetyl chloride, ethyl acetate, ethyl alcohol, and ethyl iodide. (The term "labeled" defines which carbon atom in the compound is tagged.) These compounds will be available about in the order of listing.

The barium carbide costs about \$150 per millicurie (this includes the cost of the original carbon-14). Sodium cvanide, tagged, costs about \$250 per millicurie. Others will range in price up to

· Procedure-But to buy any of the compounds, the customer must: (1) check with Tracerlab; (2) fill out AEC Form 313, stating the number of millicuries of carbon-14 needed in the compound; (3) get AEC approval on Form 374; and (4) send the original of the approval along with the purchase order to Tracerlab. Then the compound can be shipped from stock.

No extraordinary precautions are necessary either in shipping or in receiving the compounds. No shielding is needed; the glass container effectively blocks off the radiation. Tracerlab packages the vials against breakage, in an

absorbent material. • Competition Likely-It's a safe bet that Tracerlab won't be alone in the field very long. The potential value of radio-isotopes is so great that considerable quantities of compounds synthesized from carbon, sulphur, phosphorous, iodine will be needed soon.

The mechanics of vulcanization, for instance, are still a mystery. Sulphur, added to rubber before baking, causes it to vulcanize. But chemists don't know why that happens. Radioactive sulphur will help the chemists to figure out what goes on, what kind of molecular network is built. And eventually, such knowledge will allow them to "architect" the rubber structure and get a better product.

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Again, petroleum chemists would like to know just where "cracking" occurs in a petroleum molecule when different catalysts are used. By placing the tagged element at various points in the molecule, they can now tell whether it cracks in the middle, at the end, or somewhere between. That might not sound too significant, but it gives the chemist help in choosing catalysts, in forecasting cracking behavior.

Other potential uses of radio-isotopes: determining the amount of metal transfer that occurs as a shaft rotates in a bearing, improving the quality and manufacture of steel, studying synthetic fuels, making better plastics, studying the mechanism used by plants to produce food.

NEW WORSTED MILL

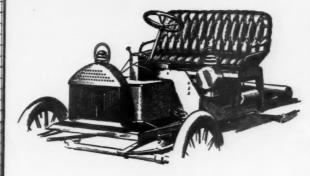
New Englanders, worrying about the South's new worsted mills (BW-Aug.16'47,p17), heard more bad news last week. At Gastonia, N. C., American Spinners, Inc., announced that it is already in three-shift production at its new plant.

The mill is another example of the spreading use of the so-called "American system." In this case, long-draft cotton-type equipment has been designed to turn out worsted yarns. It cuts spinning processes to five, as against the seven or nine needed in the older English and French systems. Because of less handling, the end product is fuller (loftier). Some say it is more uniform.

According to company officers, the new mill will be able to turn out worsted yarn at prices from 5% to 20% lower than the cost of yarn made on conventional machinery. One big reason: It takes fewer supervisory workers, uses less-skilled employees.

Operating 2,000 spindles, the plant now has a capacity of about 12,000 lb. per week. Production in the singlestory building is on a straight-line basis; wool top is trucked in from Boston and Philadelphia. The bulk of the mill's output will go into knitted outerwear and hosiery.

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Even in the days of "All-Draft" Ventilation

The horseless carriage ran better because of Hyatt Roller Bearings. Hyatt and the automobile industry grew up together... each making rapid strides...each in step with the other, constantly improving design and performance.

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design, smoother performance and long, trouble-free life. Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey.



HYATT ROLLER BEARINGS



Needed \$50,000 Quickly

and couldn't get it from present sources

An important customer had just placed his first large order. The company planned to step up production, take on more help, buy extra equipment . . . but they were completely stymied when their source of credit turned them down.



1 Unless the company wanted to try to increase working capital by taking in a partner (there was no time to float a stock issue), they would have to turn down the order and thus pass up this long-awaited opportunity to expand.



2 Then the company treasurer read Commercial Credit's book, "A Better Way to Finance Your Business." It told how their Commercial Financing Plan could supply the needed money at once... and how favorable the cost would be.



3 * & & SONS contacted their nearest Commercial Credit office. Within 48 hours they had the necessary funds at their disposal. They filled their new customer's order on time and started their long-range expansion program.



4 Now they use Commercial Credit regularly in their rapidly expanding business just as so many other manufacturers and wholesalers do who have discovered the flexibility, low cost and other advantages of this Commercial Financing Plan.

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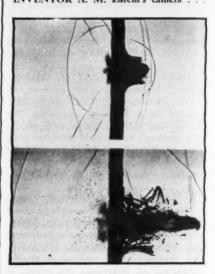
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INVENTOR A. M. Zarem's camera .



CATCHES BULLETS in mid-flight

Navy's Fast Camera Slices Time Extra-Thin

Navy scientists have developed an all-electric camera shutter capable of exposures as short as one hundred-millionth of a second-useful in ballistics, electrical studies, etc.

There are no moving parts. The extremely fast shutter time is obtained through the use of an electro-optical "Kerr cell," a glass tube filled with liquid nitrobenzene in which a pair of electrodes is immersed.

The Kerr cell is placed between two polarized lenses; their axes are at right angles to each other, so no light can pass through both. But high voltage, applied to the electrodes, turns the plane of the polarized light from the first lens so that it can pass through the second polarized lens to the film.

Separate exposures by this method have actually been taken at the rate

of 40-million exposures per second. But film can't be moved at that rate; so only one piece of film can be used.

Only five pictures can be taken in succession on one film sheet. Of course, it is impossible to apply five separate jolts of voltage to the camera shutter at this rate by mechanically closing a switch five times. So Navy technicians devised an ingenious method to solve that problem.

The voltage needed for the five exposures is applied at the same instant to five separate cables of different lengths. Each is attached to a Kerr cell. In this way the electrical impulses arrive at different time intervals—depending on the lengths of cable used. Electricity travels along wires at about 186,000 miles per second; so it is easy to see that the Navy method requires some pretty close timing.

To prevent overlapping exposures on the same sheet of film, mirrors are arranged to project each of the images transmitted through the five Kerr cells to a different part of the film.

NEW LINSEED, SOYBEAN OILS

Archer-Daniels-Midland Co. took one more step into the paint industry last week with some new paint and varnish oils. Their trade name: Admerols.

Admerols are produced by the reaction of linseed and soybean oil derivatives with butadiene, styrene, acrylic acid, and other new chemicals. A-D-M claims the products set fast, dry thoroughly, have low acidity and high stability, retain color well.

It took A-D-M five years of research to get the right system of manufacture for its new oils. Last December the first production unit went into operation in Minneapolis; a second, at Edgewater, N. J., will start this month.

The first four oils in the series are: Admerol 101, for semi-industrial, floor, and baking enamels; Admerol 251, for exterior trim and trellis paints; Admerol 301, for architectural enamels; Admerol 351, for general purpose.

351, for general purpose.

Price range of the Admerols is 15¢ to 20¢ a lb. They will be sold to the paint and varnish industry through A-D-M's own sales offices.

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TRANSFORMER STANDARDS

Electric transformer makers, like many other suppliers, are faced with steadily mounting demands for equipment. So last week the Transformer Section of the National Electrical Manufacturers' Assn. was motivating transformer makers to standardize their designs. Standards for distribution transformers on circuits up to 15,000 v. are available. Now the American Standards Assn. is developing standards for power transformers.





o be best evaluated, fire protection must be considered in the light of known results . . . results that can best be measured in terms of

ASSURED SERVICE... APPROVED SAFETY... ACCEPTED SAVINGS

Those three qualifications spell the difference between "lutomatic Sprinklev systems of fire protection and other makeshift protective equipments. The qualities of Assurance, Approval and Acceptance must be earned the hard way and, for "lutomatic Sprinklev", that way has been through more than 55 years of pioneering in the design, manufacture and installation of equipment that, on record, affords the best in fire safety.

Ohio properties, valued at better than three billion dollars, represent but a small percentage of the total valuation of "listomatic" Sprinkler protected properties, located from coast to coast and from Canada to South America. Satisfaction and known results have made "listomatic" Sprinklers the recognized first line of any fire defense. They're an important investment today . . . perhaps welcomed protection tomorrow.



"not so clever these Chinese!"

Several thousand years ago a Chinese bookbinder had a new idea. He perfected a flexible animal glue for gluing off. It dried in 3 to 4 hours. That was fast enough for the year 53 B.C. What this Chinese didn't realize was that this drying time would be much too slow for the year 1948 A.D. He unwittingly created a mass preduction bottleneck. He made slow drying speed a tradition.

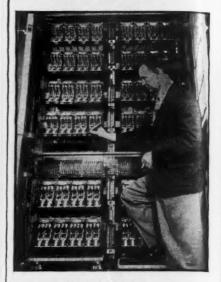
Even now, nearly four years after National successfully introduced FLEX-BACK to more than two hundred bookbinders, many still cling to the old Chinese tradition. We wonder why? FLEX-BACK is the first cold, liquid resinous glue ever to permit bookbinders to glue-off and then round and back in 10 to 20 minutes. It retains all of the advantages of flexible glues and eliminates all of the disadvantages — as it shatters the age-old production bottleneck of slow drying speed.

Offices: 270 Madison Avenue, New York 16; 3641 Washtenaw Ave., CHICAGO 32; 735 Battery St., SAN FRANCISCO 11; and other principal cities. CANADA: Meredith, Simmons & Co., Ltd., Toronto and Montreal. ENGLAND: National Adhesives, Ltd., Slough.



EVERY TYPE OF ADHESIVE FOR EVERY INDUSTRIAL USE

PICTURE REPORT



Automatic Brain ...

Automatic controls have gone to work on an old transportation bottleneck-getting space reservations. In New York last week, International Telephone & Telegraph Corp. took the wraps off a robot brain called Intelex Using equipment (above) similar to that in automatic telephone exchanges, the machine records reservations, automatically reports on available space.



... Reserves Space

Normally the board would be installed near the traffic center. Getting space for a passenger at any of the ticket offices would then involve: (1) sending a request by teleprinter to the Central Intelex office; the machine will then automatically (2) translate the teleprinted message into electrical impulses, (3) make the reservation if space is available, (4) translate the machine reply, and (5) send an answer to the ticket office. The passenger will have his confirmation in less than 20 seconds.



Cloud-soft KIMPAK shields this handsome dispenser from damage during shipment. Photo courtesy Temprite Mfg. Co., Inc.

Kimpak Float Packaging

bundles of protection for every product you pack

Ship confidently and save—thanks to reliable, low-cost KIMPAK* creped wadding. A versatile, efficient cushioning material, KIMPAK provides protection in packaging for the smallest, most delicate items to heavy and bulky products. Made in a variety of types, thicknesses and backings to suit your particular needs. You'll find a specification of cushiony KIMPAK to meet every requirement of the Four Basic Methods of Interior Packaging—Sur-

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face Protection, Blocking and Bracing, Flotation Packaging and Absorbent Packaging.

Soft, flexible and feather-light—KIMPAK adds little weight or bulk to shipments. It is made either liquid absorbent or liquid repellent. Highly resilient, it effectively withstands shock and vibration. Spotlessly clean, KIMPAK improves the appearance of any package. No wonder so many fine products are wrapped for market with KIMPAK.



Surface Protection - Drop-leaf table. Photo courtesy Phoenix Chair Company.



Flotation Packaging - Mercury bottle. Photo courtesy F. W. Berk & Company.

Free book for you. Call or write your local distributor for this fact-filled book-let on better packaging methods. He is listed in the Classified Phone Directories. Or, if you wish, merely mail this coupon.

KIMBERLY-CLARK CORPORATION Creped Wadding Division, Neenah, Wis.

Please send me the free KIMPAK booklet on better packaging methods. BW-548

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CREPED WADDING

T. M. Reg. U. S. & Can. Pat. Off



Shade better

One of the important needs of Venetian blind slat producers is camber-free steel of uniform thickness throughout width and length. Any variation prevents even application of corrosion-resistant agents and the varicolored enamels essential for best appearance, service and life. That's why CMP Thinsteel is a natural for Venetian blind slat production — accuracy to gauge is the special characteristic identified with all CMP light-gauge cold rolled strip steel products. And that's one reason why Venetian blinds made from CMP Thinsteel are showing larger profits for discriminating manufacturers and insuring customer satisfaction and good will.



the Cold Metal Products co. YOUNGSTOWN, O.

NEW YORK • CHICAGO • DETROIT ST. LOUIS • BUFFALO • INDIANAPOLIS LOS ANGELES • SAN FRANCISCO

THE PRODUCTION PATTERN

COUNTRY'S natural re-A sources don't always come out of the earth. Trained scientists and a continuing crop of young engineers also are valuable, not easily replaced, assets. During the last war, Selective Service give little heed to the engineering facts of life: the importance of the practicing scientist, and the need for a steady supply of engineering graduates. So a serious postwar famine in engineering manpower developed. The annual shortage has been variously estimated at from 13,000 to 37,000 engineers.

Whether we have learned our lesson or not is still debatable, but indications are that industry is getting ready to argue its case before a new draft law is in operation (BW-May8'48,p25). Future famines may be avoided if the arguments carry weight. Meantime, the famine of World War II seems to be about over.

Brown Instrument Co., subsidiary of Minneapolis-Honeywell Regulator Co., has just finished a survey of 17 representative engineering colleges. The results of that survey should make cheerful reading for industrialists who have been beating the bushes for engineering talent.

Here's what the Brown survey

shows:

 Student enrollment exceeds that of 1941 by 50% to 325%

• Degrees were given to 5,441 engineers in '47 classes, compared with 3,250 in '41. These figures do not include 1,000 summer students who also got degrees.

· Current enrollments show increases for the '47-'48 semesters of 104%. This will provide a still larger engineering graduating class this June.

· Of all the engineering graduates last year, 82% were veterans, who, in most instances, had entered the service in their second or third college year. Present veteran enrollment is down to 72% of the total. This shows that high schools are beginning to feed students into the college system.

HE BROWN SURVEY has other optimistic conclusions. In addition to the improved manpower supply, it indicates:

(1) A trend toward mutual understanding among the theoretical engineers, application engineers, and manufacturing engineers. This trend over a period of time, will tend to wipe out technological "class distinctions" without disparaging the vital work of each

(2) Wider cooperation between specialized industries and colleges. This should narrow the gap between the diploma and paycheck.

(3) A growing consciousness of the value of engineering-trained personnel in other types of jobs.

In presenting the results of the survey, George M. Muschamp, vice-president in charge of engineering for Brown, adds some pertinent warnings: (1) The gulf between campus and job must be closed faster, either through apprenticeship or better teamwork between professors and industries; (2) Some men are scientists and others are fundamentally engineers one cannot be transformed into the other easily; and (3) More and more students must be encouraged to follow the paths of pure science, developing basic concepts which their more engineering-minded colleagues can translate into com-mercial realities.

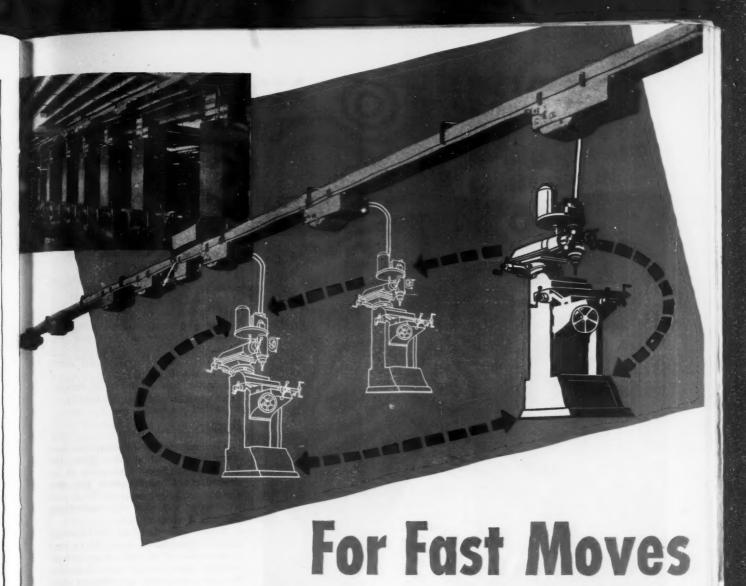
Industry today, then, can look hopefully to the growing crop of scientists and engineers. But that crop won't prosper without careful cultivation, and protection against depletion by hasty draft policies.

REPLACEMENT BOOST

Industry, like a ball club, depends on a steady flow of good replacements. Last week Monarch Machine Tool Co. of Sidney, Ohio, set out to help keep the pipeline of trained youngsters full. Company directors set up a \$30,000 fund for engineering scholarships for youth of the company's home county-

Over the next five years, 15 awards of \$2,000 each will go to boys graduating from schools in the county. The company will pay out the money in amounts of \$500 a year toward the cost of a four-year course in mechanical or electrical engineering at any accredited col-

As for jobs after graduation, Monarch tied no strings to the awards. But the company hopes that winners will



Relocate machines with no delays for rewiring

Power can be taken off wherever needed with this convenient, flexible and economical distribution system.

Power where you want it — with Trumbull FLEX-A-POWER Plug-In Busways—gives you maximum flexibility in machine arrangement without the cost and nuisance of rewiring each time you change the layout.

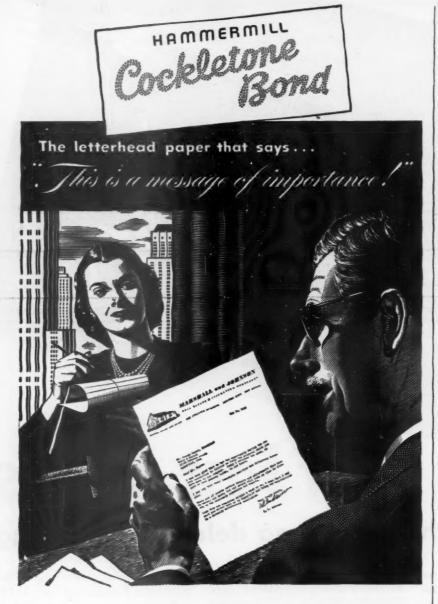
With FLEX-A-POWER Plug-In Busways covering your whole plant, you can move a machine or a whole line of machines with no interruption of power. Convenient outlets every 12 inches permit plug-ins right at the load.

Even when major changeovers require moving an entire department, the FLEX-A-POWER system can be moved along, too — dismantled, removed and reinstalled quickly, with practically 100% use of all materials.

That's because every part of a Trumbull Busway System is prefabricated, which of course reduces original installation and construction costs. FLEX-A-POWER is stocked in standard 10 foot lengths and is available in capacities from 250 to 1000 amp. with all necessary fittings and accessories.

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Business messages on Cockletone Bond command attention wherever they are received. For this handsome paper has the "heavier feel", the crisp crackle and snap that add a reflection of substance and dignity to any business letter. Examine this newest accomplishment of Ham-

mermill papermaking research and skills... and consider appointing it your representative. (Its moderate cost may surprise you.) Just send the coupon for samples.

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Please send me—FREE—Cockletone Bond Portfolio and sample book.

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give Sidney firms-particularly Molarch-preference when they pick their spots.

HEAT-TREATED STEEL

During the war, both the U.S. and Germany stepped up research into the heat treatment of steel and steel alloys. The reason: the need for better steel to meet stiff materiel requirements. Some of the findings of the American and German experiments are now published in a group of 10 reports by the Office of Technical Services, Dept. of Commerce. In the series:

• The effect of long-time heating on hardness and structure of 27% chromium-iron alloys (PB-62830).

• Absorption of hydrogen during the annealing process, and its effect on formation of flakes and brittleness (PB-64725).

• Manufacture of electrical steel sheets in Germany (PB-65673).

• Induction heating: annealing, tempering, and strain-relieving (PB-49265).

PUFFED SHALE

The concrete-block business has borrowed a production idea from the breakfast-food field. This week at Independence, Ohio, Bric-Bloc, Inc., was turning out a new concrete block with a filling of exploded shale—something like puffed wheat or rice.

Advantages claimed for the blown-up filler: a lighter block, more blocks from a given amount of shale, improved insulation (from the air trapped inside). Company engineers say that an 8-in. block of the new type gives as much insulation as an ordinary 12-in. concrete block.

Right now manufacturing is being done in a 30 ft. by 60 ft. pilot building. Later this summer, the company plans to put up a large plant on the same site.

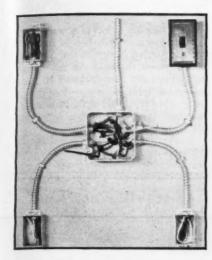
Bric-Bloc expects to license the manufacture of the blocks all over the country.

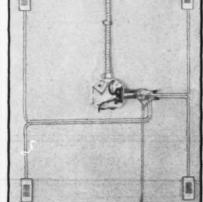
P. S.

Synthetic iron oxides were produced on a big scale in Germany during the war. How they were manufactured is covered in Report PB-79308 of the Office of Technical Services, Dept. of Commerce.

Magnetic storms caused by sunspots can now be accurately forecast. Research done by Radio Corp. of America's engineers showed that, over short periods, the time of the storms can be predicted to within 15 min. of their start. Composition and polarity of the spots—rather than size—determine how much damage the storms will cause to radio circuits.

NEW PRODUCTS





Low-Voltage Wiring

A remote-control electrical wiring system that uses low voltage current has been developed for factories, offices, and homes by General Electric Co. Because of the low voltage, the new system (right, above) gives multi-switch control of a single outlet or light without the heavy cables and switchbox needed with conventional wiring systems (left).

Switches are connected through relays to their outlets by lightweight, insulated 22-gage wire, carrying 25 v. The low voltage is supplied by a transformer installed somewhere in the building (one transformer will handle an average-size home). A midget relay, working on 25 v. is mounted at each outlet or light. This relay opens and closes the 115-v. circuit (turning the light on or off) when the switch is pushed.

Because of the low voltage at the switches, there is no danger of shock. As many switches as you want can be connected in parallel to control a single light or outlet. No more than three outlets, however, should be wired to a single switch unless a larger transformer is used. The system is manufactured at G.E.'s Wiring Service Division, Bridgeport 2, Conn.

• Availability: immediate through electrical wholesalers.

Packaged Paint Shop

All that it takes to paint a car comes wrapped up in Pad-O-Paint. The kit, manufactured by Arco Co., has enough paint (synthetic alkyd enamel) for two full coats, a special paint-saving tray, and a painting glove that makes a smooth, even finish quick and easy.

The glove is made of moisture-proof, treated fabric. A cotton pile fabric is attached with snappers over the thumb

and finger ends. The finger-tip-andpalm pad paints an area about equal to the surface covered by a 5-in. brush; the thumb pad is comparable to a narrow brush. The mitt can be used on either hand.

The paint-saving tray fits into the top of the paint can. According to Arco, it makes it impossible to get an overload of paint on the mitt.

Other materials in the kit: a solvent cleaner for removing dirt and wax before painting, sandpaper, plastic material for filling cracks, spatula, and lint

· Availability: immediate.

Prefinished Panel

Pressed-wood wall panels with a simulated wood grain are made by Woodall Industries, Inc. The graining is done with a lithographic process using specially compounded inks. A coat of clear lacquer goes on top.

The company's Service Products Division turns out Ser-Wall panels completely prefinished and ready to be nailed on the wall. Edges are beveled so that pieces can be butted together; nails go in along a notched line on the border. According to Woodall, the panels can be washed with soap and water, won't crack or peel. Retail price will be about 33¢ a sq. ft. The manufacturer's address: 2035 Calumet Ave., Chicago 16.

· Availability: immediate.

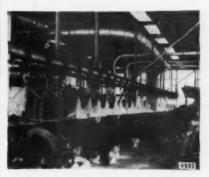
Watertight Wheel

Materials-handling equipment on some jobs has to be cleaned frequently to keep it up to snuff with sanitary standards. Parts take a beating from the water, steam, and detergent sprays that are used.

So Aerol Co., 1823 E. Washington



In the room shown below, The Apex Electrical Mfg. Co., of Cleveland grinds and polishes aluminum agitators for washing machines. These operations create considerable aluminum dust, yet—the air is perfectly clean because of the Sly Dust Control System.



Hoods at 8 grinders and 18 polishing machines are connected with piping to the Sty Dust Filter outside (shown below). No dust escapes into the plant; the dust-laden air is drawn through the pipes into the filter and all dust removed. The result is better working conditions, maintenance of quality of product, savings in plant operation—good dividends.



THE W. W. SLY MFG. CO.
4749 Train Avenue - Cleveland 2, Ohio
PIONEERS in Industrial Dust Control

Representatives in New York • Chicage • Philadelphia Detroit • Cincinnati • Rechester • St. Louis • Toronte Los Angeles • Birmingham • Minnaepolis





Dictate while you travel . . . and return to a clear desk!

Here is a profitable tip for your next business trip . . . take along a SOUNDSCRIBER Portable the very next time you head for the field. This silent, dutiful "secretary" is ready . . . day or night, and week-ends, too . . . to take down your thoughts . . . speed facts from the firing-line direct to your office or factory . . . giving you an accurate, up-to-the-minute report of your relations with customers and prospects.

Get the jump on competition! Dictate reports, memos, instructions, letters . . . on the train, in your hotel room, or your automobile . . . while the facts are fresh.

SOUNDSCRIBER Portables convert travel-time into profit . . . keep work from piling up back at the office . . . speed your field work . . . increase calls, multiply profit opportunities.

Produce more profits with this revolutionary business tool which, incidentally, is the only complete, self-contained portable dictation unit—a handsome piece of business luggage, Mail coupon now!



Blvd., Los Angeles 21, is now turning out an industrial wheel to stand the gaff. It is watertight and is made of lightweight, corrosion-resistant aluminum alloy.

The company achieves a waterproof seal by using a combination of threaded retainer spacers, Neoprene rings, and retainer spacers (to hold the roller bearings). Parts are manufactured to close tolerances (plus or minus 0.003 in Aerol says there is no need to lubricate or adjust the wheel during its normal life.

A solid rubber tire is molded on the wheel core; the rubber—oil and brine resistant—does not mark floors. Wheel sizes run 6 in., 8 in., 10 in., 14 in., 20 in. They can be had with axle mountings either on the inside or outside.

• Availability: within 30 days.

Tile Sealer

Armstrong Cork Co.'s Industrial Division, Lancaster, Pa., cites three points to boost its new sealing material for wall tiles: It is nonporous; it resists water; it is easy to clean with soap and water.

Called Ceramite, the pure white compound can be used to seal joints of metal, plastic, or ceramic tile. It sets within a few hours after application.

At normal room temperatures, the material will not become brittle. It will withstand the small movement in the tile caused by seasonal changes in temperature. Above 100 F, the compound is flexible enough to take the greater expansion and contraction of walls around showers, radiators, or chimneys.

• Availability: manufacturers only.

Dip Additive

A new additive for acid dips used on metals before electroplating has been developed by Enthone, Inc., 442 Elm St., New Haven 2, Conn. The material removes colloidal films that may be deposited on the surface of the metal during cleaning. These films cause the plate to spot or streak.

According to the manufacturer, the additive works particularly well in dips for nonferrous metals before bright nickel plating. The material, which is called Actane, is a neutral activating compound; it is manufactured in salt form.

Enthone says the additive will not affect the adhesion of the plate.

• Availability: immediate.

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Soy Bean Powder

For industrial use, Spencer Kellogg & Sons, Inc., has a new refined soybean protein. Called Kelkote, it is already being used in the preparation of wall-paper coatings. The company says that its fine, light-cream powder (1) has a

high adhesive strength, and (2) is suited for use with casein, latex, and various pigments.

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Other possible applications for the protein: in glues, plastics, protective coatings, paper and paper converting. The company address: Decatur 80, Ill.

• Availability: immediate.



Color Comparer

Accurate color matching is an essential in paint, textile, and other industries. Pittsburgh Plate Glass Co. has now made color comparisons easier with an instrument based on the photoelectric cell.

PPG-IDL Color Eye does it by measuring the amount of light reflected from the sample and from the color standard. The difference is recorded as a percentage on a meter.

Besides measuring the difference, the instrument will show the color value of the sample itself. It gives either (1) an approximate reading of the light reflected from the sample through the use of a logarithmic scale, or (2) a more accurate reading by comparing the sample with a white standard.

The instrument will be marketed by Instrument Development Laboratories, Inc., Williston Park, Long Island, N. Y.

• Availability: August or September.

Animated Billboard

From a cost standpoint, the small advertiser often finds electrical travel-message signs beyond his reach. Brite-Lite Corp. of America, 6411 Holly-wood Blvd., Los Angeles, thinks it may be able to change the picture with its new animated sign. According to the company, the display is practical for any installation—at a cost within the range of even a limited budget.

The sign face (11½ ft. long, 1½ ft. wide) holds 300 7½-w. bulbs. The panel is regulated from a control unit installed outdoors with the sign or inside a



Collecting stamps may be great fun -



but sticking same, sez me, is none!

(1) Separate single stamp from sheet or strip ...
(2) hold it ... (3) moisten ... (4) place in position on envelope ... (5) press so it sticks ... Nothing to it!
But mail fifty letters and you feel tired. Psychologists explain that meticulous motions with small objects require concentration and exact effort—tire most people quickly. Stamp sticking is actually one of those precision jobs better done by machines than people!

The postage meter displaces the adhesive stamp
... prints postage, in any amount needed, as needed,
directly on the envelope ... or on gummed tape for
parcel post...also prints dated postmark, seals envelope
... Faster, better than anybody can do it by hand!
Extra advantages: protects postage from loss or

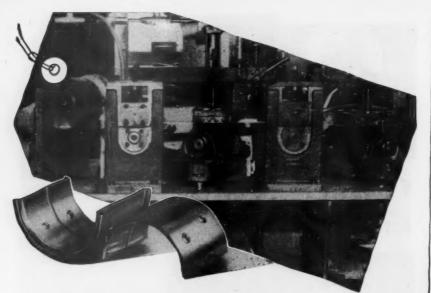
damage; automatically accounts for postage used.

There's a PB meter for any size office. Call or write for illustrated booklet.



PITNEY-BOWES
Postage Meter

PITNEY-BOWES, Incorporated 1442 Pacific Street, Stamford, Conn. Originators of Metered Mail. Largest makers of mailing machines. Branches in 68 cities in the U.S. and Canada,



OSBORN BRUSHES help put lower price tag on sleeve bearings!

HE "American Way" is at work again! Increase production, I improve quality and lower cost. That's what the Federal-Mogul Corp., Detroit, Mich., did with the development of a continuous strip process for the production of plain and flanged "thin wall" engine bearings.

Pictured above is the special automatic brushing machine which is built into this production line and through which miles of steel backed, babbitt lined strip are processed daily. Traveling from right to left the steel backed surface of the strip is first cleaned of all dirt, rust and scale by two brushing units having a 10-inch face made up of Osborn Master wire wheel sections. A special air pressure arrangement at both these stations maintains constant pressure on strip to insure uniform cleaning and longer brush life. The third and final brushing unit at left, consisting of Osborn Monarch Tampico sections, then cleans all dirt from the babbitt lined side of the strip.

Speed, efficiency, economy - you get all three benefits when you adopt Osborn Brushes for cleaning, burr removal, roughing, polishing and finishing. The reason - better brushes properly selected by experienced Osborn sales engineers for better results. You can't beat this combination of quality and experience -and it's yours for the asking.

> THE OSBORN MANUFACTURING COMPANY Cleveland, Obio 5401 Hamilton Avenue



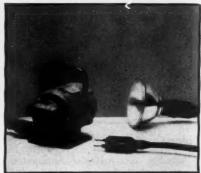
WORLD'S LARGEST MANUFACTURERS OF BRUSHES FOR INDUSTRY POWER DRIVEN BRUSHES . PAINT BRUSHES . MAINTENANCE BRUSHES

building. Letters are flashed on the panel by running a perforated tape through a scanning switch; the sales message can be any length you want. Once the message is finished, the tape rewinds and repeats automatically. A stationary slogan or trademark can be shown while the rewinding is going on.

The control unit measures 4 ft. long, ft. high; it is completely automatic. Cost of power to run the sign naturally varies according to location; in California, the estimate is about 40¢ for 8hr. continuous operation.

· Availability: now on a lease basis, in

California alone (about 60 days); national distribution is planned later.



Air-Powered Generator

Compressed air used to run tools can double as a power source for lighting up the job. It's done with a small portable generator, the Airlite, developed by Ingersoll-Rand Co., 11 Broadway, New York 4, N. Y. The generator connects to an air hose, puts out enough power to light two 75-w. bulbs.

Big advantage of the equipment: It

saves stringing electric lines for temporary jobs. The unit is lightweight (84 lb.) and small (74 in. by 5 in.). The company says it can't be harmed by short circuits or overloads. When output terminals are shorted, the light goes back on just as soon as the short

· Availability: immediate.

P. S.

An electric shaver for your car is the latest thing in Hudson Motor Car accessories. It plugs into the cigar-lighter fixture on the dashboard. Remington

Rand, Inc., makes it.

Odorless latex foam mattresses have been announced by Hewitt Restfoam Division of Hewitt-Robins, Inc., Buf-

Combination radio and inter-call system, the DorAfone, is a development of Setchell Carlson, Inc., St. Paul, Minn. The set will sell at about the same price as a portable radio or table model.



Millions of people changed our name

You may think it strange that millions of people could have a voice in changing a company's name, but that is what has happened to The American Rolling Mill Company.

Several years after the company started operations in 1900, it adopted the trademark "Armco" for its special grades of steel. The Armco trademark—composed of the first letter in each word of the company name—has been widely advertised and appears on all the company's products. Many Armco customers identify their use of these special-purpose steels with this familiar trademark.

Through the years—as the original small mill grew into one of the country's great steel companies—our customers, dealers and the public alike have preferred to call the company "Armco."

So, in recognition of this preference, the name of the company has been changed from The American Rolling Mill Company to Armco Steel Corporation.

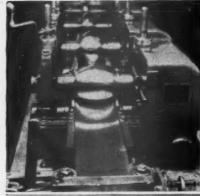
The change is one of name only. It does not affect Armco management, personnel and long-established policies. It does emphasize more strongly the importance of the Armco trademark, and increases its value to those who use Armco Special-Purpose steels in the things they make.

The alert research and production men who have perfected so many special-purpose grades of Armco steel will continue to improve present steels while developing new ones to help manufacturers build better products for the home, farm and industry. Armco Steel Corporation, Middletown, Ohio. Export: The Armco International Corporation.



ARMCO STEEL CORPORATION

THE FAMILIAR ARMCO TRIANGLE IDENTIFIES SPECIAL-PURPOSE STEELS THAT HELP MANUFACTURERS MAKE MORE ATTRACTIVE, MORE USEFUL, LONGER-LASTING PRODUCTS





Simplified

In recent years tube making, as perfected by Yoder, has been so simplified that with only one or two operators, you can easily produce from 30,000 to 60,000 feet per day of tubing up to 3½" dia., testing up to 6,000 lbs. or more per sq. in., having the finest surface finish and unexcelled fabricating qualities. The Yoder patented electric resistance tube welder, the most efficient yet known, has greatly increased production and lowered operating cost.

This Yoder development has powerfully stimulated the use of tubing for structural and ornamental purposes, opening up attractive new profit possibilities in tube making. Since 1939, over 100 Yoder tube mills have been installed here and abroad, yet the supply of pipe and tubing is far behind the demand. Yoder mills make pipe and tubing from ½" up to 36" dia.

Literature • Estimates • Recommendations

THE YODER COMPANY
5530 Walworth Ave. • Cleveland 2, Ohio



TUBE MILL MACHINERY

MARKETING

Hudson to Drop Middlemen

Joins parade of automakers who are giving up wholesaler system to sell by straight factory-to-dealer method. Reasons: Dealers have money now, factories will save 2% overriding charge.

For a long while, distributors (wholesalers) were a considerable marketing factor in autos. They bought cars from the factories, sold them to the retail dealers. Often they also functioned as dealers themselves.

• Shift-During the past few years, however, the distributor system has grown smaller and smaller; automakers have tended to go to a straight dealer-outlet system of selling. Last week another one-Hudson Motor Car Co.—decided to make the move. By next August, Hudson will have switched over almost completely to the dealer-outlet system.

Hudson will be the fifth carmaker to drop its middlemen since the war. Studebaker and Nash were the first. Packard came next—but, for old time's sake, kept six of its distributors who had been with them for years. About a year ago, the Chrysler Division of Chrysler Corp., joined the parade.

Chrysler Corp., joined the parade.

• Zone System—Hudson, also for old time's sake, will keep on a few of its 102 distributors. But it will replace all the others with a system of 20 new zone offices, 11 of which are already in operation. These will supervise the franchising and contacts of about 2,250 of Hudson's national network of 2,400 dealers

Hudson zone operations already established are in Atlanta, Buffalo, Chicago, Cincinnati, Detroit, Los Angeles, Memphis, Milwaukee, New York, St. Louis, and Washington. Between now and August, the rest of the zones will set up at Boston, Cleveland, Dallas,



Customers Relax and Shop in Houston Store

Housewives in Houston, Tex., can now sit while they shop—at this new-type grocery. As items pass in front of them on a conveyor line they select the ones they want and place them on a moving belt which leads to the checking desk. H. H. Shugart,

The machinery was custom designed and built. The big question is: Can the store make a satisfactory profit big enough to justify the investment? Shugart says added volume will do the trick. Sales started out slowly, but have been climbing steadily. He plans to lease rights to food chains.

Kansas City, Minneapolis, Philadelphia, Pittsburgh, Portland, Ore., and San Francisco.

• Four Left—The Hudson move leaves only four companies that still have distributor-dealer systems—Cadillac (General Motors); DeSoto (Chrysler); Kaiser-Frazer; and Willys-Overland.

Of these, DeSoto's is a sort of cross between a distributor system and a direct-dealer system. In DeSoto language, direct dealers function as distributors and have associate dealers working under them. The methods differ in this way: While a distributor may have as many as 200 dealers under him, a direct dealer will rarely have more than 6 to 10 associates.

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Buick, Dodge, and Pontiac have also operated under the direct-and-associate, or direct-and-indirect, dealer systems. But each of these companies is shifting more and more toward direct dealers. Last fall, Buick transformed almost all its indirect dealers into direct dealers.

• Distributor Problems—To handle the dual jobber-retailer task, the distributor has had to have plenty of money and plenty of sales ability. He had to keep his entire territory hopped up to doing its full quota of business. His reward: a 2% "override" commission on all the cars his dealers sold, plus the dealer discount on all cars he sold himself.

The gradual drying up of this arrangement is due largely to the growing financial maturity of automobile selling. In the early days, few dealers could afford the big outlays necessary to operate in the field. And the factories themselves had neither the funds nor the personnel to staff nationwide organizations. So the obvious way for them to get broad distribution was through moneyed distributors.

• More Money—But today money is plentiful. Dealers have enough capital to run their own operations without help from middlemen. So factories are grabbing the chance to recover the 2% distributor override by shifting to direct-outlet systems. They feel that saving this 2% more than justifies the problems of having to do business with thousands of outlets instead of just a hundred or two.

There's another angle, too: By selling direct to dealers, the automakers keep closer control of their sales outlets. They don't run the risk of having an irate distributor switch to a competitor, leaving his original supplier with a deficit of a couple hundred dealers.

Streamlining its distribution system will in time bring another important advantage to Hudson. Hudson will be closer to its dealers, can better correlate advertising and promotion programs with them, even change the pace of these programs when the competitive going requires it.



Manufacturers of appliances show sound forethought when they equip their products with General Electric Flamenol® cord sets. It's the smart way to add that extra touch that spells out S-A-L-E-S.

On a wide range of products lamps, fans, clocks, radios and other light-duty appliances these durable, attractive cord sets catch the eye and attract the customer.

General Electric Flamenol cord sets make friends for your products after they are sold, too. They won't fray or kink or come apart at the seams. The plug is strong, and holds the prongs in firm alignment. The cord's smooth, thermoplastic insulation resists oil, acids, water, and grime—and it's a cinch to keep clean.

These smart cord sets are readily available in standard ivory or brown, in 6-, 8-, and 11-foot lengths. Special colors and designs can also be supplied to individual specifications.

If you have a slow-moving cord-equipped item in your line, perhaps a General Electric Flamenol cord set is just what it needs to make it sell. To get the facts, write to Section Q13-510, General Electric Company, Bridgeport 2, Connecticut.





What do you know... about CONNECTICUT?

It would be to the advantage of industrial executives to know all of these facts about Connecticut: ... Although it is only 87 miles wide ... and 73 miles from Northern to Southern border ... Connecticut contains one of the widest cross-sections of all industry in the United States. No point in Connecticut is more than 170 road miles from New York City—and so every Connecticut factory site is conveniently near the world's greatest markets ... and sources of semi-finished materials.

Management and labor get along well together in Connecticut. Output per hour

Management and labor get along well together in Connecticut. Output per hour is very high. Strikes are rare. Connecticut workmen are traditionally known for their exceptional skill and industry. A look at a map-highway, rail, airline—will show how well Connecticut is equipped with modern transportation facilities.

Our Industrial Research Division will show you the special advantages

Connecticut can offer your type of industry. This service is free! Write to Connecticut Development Commission, Dept. WB-4, State Office Building, Hartford 15, Connecticut.



Urge to Splurge

Du Pont survey indicates that about 30% of items purchased in service grocery stores are bought on "impulse."

Every marketer knows that when you put goods out in the open where the shopper can get her hands on them, she'll grab more than she intended. Two years ago, du Pont tried to measure such "impulse buying" in supermarkets. The findings: 38.2% of items sold were unplanned purchases (BW-Jun. 29'46,p86).

• Service Stores—This week du Pont was mailing out a new survey on the same subject—but this one covered service (clerk-operated) grocery stores. Surprisingly, says du Pont, "impulse buying" here, too, is high—29.9% of items move that way. Clerks don't seem to be much of a factor in the urge to splurge. Packaging is—and that's where du Pont comes in. All in all:

• About 46% of items purchased are planned in advance.

• About 22% are generally—but not specifically—planned. Thus, the house-wife may decide to buy fruit for dessert, but she'll wait until she gets into the store to make up her mind which kind. (Here's where the influence of a clerk shows up big.)

About 2% are substitute purchases.
About 30% are unplanned purchases

–the "impulse" type which du Pont
thinks are heavily influenced by pack-

Du Pont's survey was made last summer in 70 stores, among 1,448 shoppers. The housewife was asked for her shopping list as she entered the store; as she left, the interviewer nabbed her again to see what she actually had bought.

• Impulse Items—High on the "impulse" list were the following:

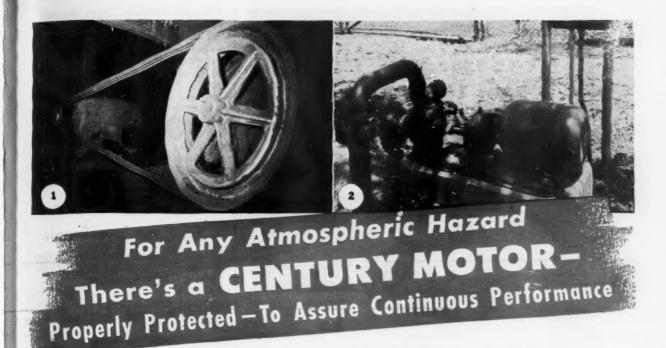
			9.
			Unplanne Purchase
Item			%
Candy			. 80.0
Frozen fish			
Cookies, biscuits			. 63.0
Frozen fruits			. 57.1
Cake			. 56.4
Sweet rolls, coffee cal	ke		. 56.0
Jams, jellies, relishes,	spread	S.	. 50.6

The samples above are from a larger

MORE FROM GENERAL MILLS

list of 40 items.

In 1946, General Mills, Inc., got into the appliance business by bringing out a new electric iron (BW-Aug.10'46, p76). A short while later, a pressure saucepan appeared. Then, while its sales force distributed these new prod-



To protect motors against the hazards of abnormal atmospheres, Century provides Totally Enclosed Fan Cooled and Explosion Proof frames, also Splash Proof.

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These are in addition to open type frames on which the upper half of the frame is protected against falling or dripping particles.

Whatever your requirements there's a Century motor designed to accurately meet the needs of your equipment.

The illustrations here are typical of the variety of applications which are successfully powered by Century motors.

- 1 Century 71/2 horsepower totally enclosed fan cooled motor drives an elevator leg in a dusty, dirty atmosphere.
- 2—Century 5 horsepower explosion proof motor provides protection against explosions at a gasoline storage plant.

- 3 Three horsepower Century splash proof motors provide protection from splashing water as well as from all kinds of weather conditions on a railroad car-washing unit.
- 4—Century 100 horsepower general purpose motors are used to drive air compressors in clean surroundings.

Century builds a complete line of fractional and integral horsepower electric motors in sizes from 1/6 to 400 horsepower to meet the requirements of industrial production, commercial and appliance needs.

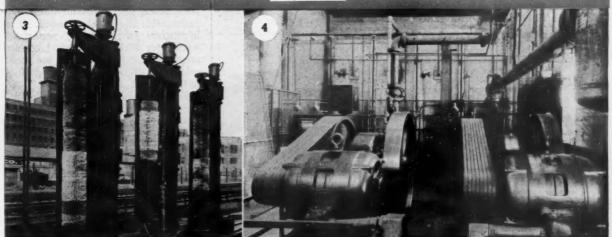
Specify Century for all your electric power requirements.

CENTURY ELECTRIC COMPANY

1806 Pine Street, St. Louis 3, Missouri Offices and Stock Points in Principal Cities

CE592







Want to get your sales message across to more prospective customers . . . for less money?

Want to hit them more frequently with attractive, forceful advertising literature without wrecking your advertising budget?

You can do all this ... at low cost ... with a Davidson Dual Duplicator . . . right in your own office. For instance, with your Davidson you can produce advertising folders, booklets, mailing pieces, in one or more colors . . . with illustrations in halftone or line from photos or drawings. You can produce your own letterheads and envelopes, sales bulletins, form letters, price lists, post cards, blotters. You can imprint dealers' names and addresses on your advertising literature. And all at a fraction of the usual cost.

Of course, we're talking about quality work ... advertising you'll be proud of ... clean, sharp impressions ... fine halftone work ... excellent color register. And, remember ... only a Davidson can give you all this in one machine for only a Davidson provides both offset and relief duplicating.

We'd like to tell you more about the Davidson . . . show you samples of the work it does. Write today . . . there's no obligation.

DAVIDSON MANUFACTURING CORPORATION 1034-60 West Adams St., Chicago 7, Illinois

Position Polyment Contract Assets

Davidson Sales and Service Agencies are located in principal cities of the U. S., Canada, Mexico and abroad.





DUPLICATORS - PAPER MASTERS - OFFICE FOLDING MACHINES - SUPPLIES A SENERATION OF EXPERIENCE IN THE MANUFACTURE OF OFFICE EQUIPMENT ucts, the company began designing other traffic (small) appliances.

This week General Mills' plans looked thus:

• A steam attachment for its iron will be in retail channels this month onext;

• A new automatic toaster goes into production next fall;

• An automatic coffeemaker, now reads for production engineering, will be set for tooling within two or three months; • A food mixer for home use is on General Mills' drafting boards.

Beauty-Shop Business Tangles on Two Fronts

The permanent wave business had two hair-do snarls on its mind this week.

One is a problem that has been bothering manufacturers of beauty-shop supplies: Who should get the creditand royalties—for the invention of machineless permanent waves?

The other is: How to smooth down the competition of home permanents which can't just be brushed off.

which can't just be brushed off.

• Problem No. 1-Last week, the first question got an answer from the U. S. District Court in Chicago. In the case of Sales Affiliates, Inc., vs. Helenc Curtis Industries, Inc., Judge Michael L. Igoe declared that Sales Affiliates patents on machineless permanent waves (1) were valid, and (2) had been infringed by Helene Curtis.

Sales Affiliates hasn't put on the record how much money it wants to assuage its pride and pocketbook; the total is rumored to be over \$1-million. As yet, no settlement has been made.

Machineless permanents form only one part of the permanent wave market (trade estimates place it at 35%). Machine waves account for another 25%; cold waves—both home and beauty shop—make up 40%.

• Cold-Wave War—The answer to problem No. 2—the competition that home permanents are giving the beauty parlors—still hasn't been found. The beauticians (who rely on permanent waving for about half their take) are staggering under the blows of the home cold waves—Toni, Hedy, Richard Hudnut, and about 40 others.

But there is some slight balm for the beauty operators: The number of waves given in beauty parlors hasn't slid too far. The real squeeze on beauty shops comes from the fact that, to compete with home permanents, beauticians have had to cut prices for the professional waves. Even women in the upper-income brackets have begun to wonder about paying up to \$30 for a beauty-shop cold wave when they can get the ingredients for \$2.

WE'RE "FRAMING" THIS MESSAGE TO GET Your Attention!



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Advanced Instrumentation

Honeywell

Graybar "Teletalk" dealers | Back to School are in all principal cities

It is easy to buy a "Teletalk" intercommunication system...you don't have to go far to consult with a Graybar Teletalk" dealer ...just pick up your phone book; you'll find them

listed in the classified section. A call will bring experienced

aid with suggestions on the number and types of units needed for greatest efficiency, their correct placement and complete information on



how to get the most out of an intercommunication system. These fully experienced Graybar dealers can give help that means greater economy for you.

Call your nearest Graybar "Teletalk" dealer today. If you should not find him listed, write to the Graybar address given below, and a dealer ill contact you.





White teaches salesmen how to sell trucks in tougher market. Stress is on service—and knowing the truck for the job.

Four years ago, White Motor Co., Cleveland, rolled up its sleeves to get set for a postwar market. Sooner or later, White figured, that market would need a hypo.

As a result of those plans, a good part of the company sales force is going to school this week. By early fall, when the new truck models will be coming off the line, nearly 1,000 salesmen will be retrained. They'll be ready to go on the road with the new modelsand the know-how for selling them in what is expected to be a fairly competitive market.

• Schooling Needed-Company officials admit that the schooling is in order. Prewar training concentrated on the prevalent conventional selling; when the going gets hot again, officials feel they can use something better. Another selling problem: The postwar sales staff is made up partly of company veterans who need to brush up on new techniques, partly of new men who know little about truck selling in really competitive market.

The pitch on the new training program is this: The right truck for the

right job. To make that more than a slogan, White worked out seven sales instruction books, a handy slide rule for its salesmen, and the training course.

The course consists of 21 weekly classes for all salesmen, distributors, service managers, parts superintendents, and dealers. Right now it's under way in the company's 42 branch offices. Teachers are district managers, other executives who went through the whole course first.

When a salesman finishes the course at par he has at his fingertips a complete engineering knowledge of the White product. He knows how to apply that knowledge to the problem of hauling any kind of a load over all kinds of terrain. He can recommend to the truck buyer the best type of truck for his purpose.

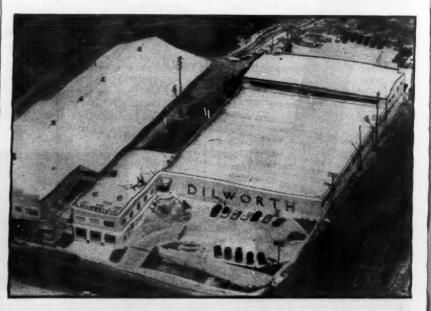
• Course of Study-The program is

built around three basic factors in the operation of motor trucks:

(1) Picking the right truck in the first place;

(2) Operating it properly; (3) Taking care of it.

• Result—A salesman learns to analyze the individual operation needs of each potential truck buyer. With the White truck-performance slide rule, he can quickly find such engineering specifications as the horsepower needed to drive a vehicle of given weight up a cer-tain grade at a given speed. Then he can guide the customer to the truck that will do the job. That is, the sales-



Another New Warehouse for Memphis

Since the end of the war, various industries have spent more than \$5-million on new warehouses in Memphis. The latest addition to the list is this building of J. E. Dil-

worth Co., 2 mill supply and heavy machinery distributor. Built at a cost of \$500,-000, it follows the trend to one-story warehouses (BW-Dec.13'47,p24).

Head of Kansas City's Index Employment Company uses Teletalk for contact with entire organization

Mr. Arthur C. Haysler, owner and active head of one of the country's largest employment companies states, "Teletalk gives me instant 2-way voice contact with each of my 42 associates, without leaving my desk."

A "Teletalk" interoffice communication system links Mr. Haysler with reception room, manager's office, credit manager's office, waiting room, file room and with job counselors. Voice-to-voice contact is maintained without anyone leaving his desk. This savestime, conserves energy and aids in accomplishing more

work each day.

For the business owner who wants a short cut to a greater output of work and resultant increased profits, "Teletalk" is an investment that will save its cost many times over. You'll find that adding a "Teletalk" communication system is like adding manpower to your organization without adding to your overhead.

Let one of the "Teletalk" dealers listed in your phone book come in and demonstrate how this equipment can save time and improve efficiency for you.



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Thousands of Problems Like These Were Solved with TRANE Heating and Air Conditioning

how about YOUR Problem?

The owners of these smart new apart ment houses knew that some day air conditioning might be necessary to attract tenants. As an economical solution to their problem, they chose a Trane system that gave them heating with provision for easily adding cooling to the existing system later.

PROBLEMS IN COMFORT

When this new coaxial cable plant was built, comfort requirements were found to be diverse. To provide needed ventilation for the cafeteria, conditioning fresh air for the hospital, and regulated heating for the factory areas, a Trane system was selected.





This candy manufacturer needed chilled and dehumidified air to keep chocolate from turning white, yet he didn't want his workers uncomfortable. It was found that a Trane system could provide the delicate tempera-ture balance needed for both chocolate and workers.

PROCESSES

The dyeing and bleaching vats at this bleachery gave off vast quantities of water vapor. The vapor condensed on ceilings and dripped onto the cloth. A Trane system got rid of the vapors, put an end to cloth spoilage, and improved plant working conditions.



There is a Trane system to solve every kind of heating and air conditioning problem efficiently, whether it be comfort or process—domestic, commercial, or industrial. Trane systems are designed by architect, engineer, or contractor to fit your application. 200 Trane Field Engineers offer their counsel. Users' names on request.

HEATING and AIR CONDITIONING

THE TRANE COMPANY, LA CROSSE, WISCONSIN S. Y S 1.8 THO TRANS COMPANY OF CANAU

man practically has a service function for the buyer.

White believes that this is the first time that the methods and ideas of the engineers, transportation experts, outstanding fleet operators, and other thorities have all been brought together as a powerful sales tool for truck sales men. The whole program is outlined in White's 132-page bound book, "Correct Application of Motor Trucks." That's the White salesman's bible to-

Bill Would Streamline Federal Buying, Selling

Streamlined government marketing methods-both in procurement and in surplus disposal-are in the works. Last week both House and Senate were considering a law to put government buying and selling under a single administrator.

• Transfer-This legislation is the federal property act of 1948. Brainchild of the Federal Works Agency, it would transfer the War Assets Administration and Bureau of Federal Supply to the FWA. With certain exceptions, FWA would then take charge of procure



WIN A BANK ACCOUNT

An eye catcher at the recent Philadelphia Home Show was this ear of corn in a fishbowl. It was put there by the Corn Exchange National Bank & Trust Co., which saw the show as a good occasion to plug its banking services.

Visitors were invited to guess the number of kernels on the ear. Of the 8,000 people who took a stab at the number, 15 guessed right. Their prizes: \$5 savings accounts with Corn Exchange.



Buildings, like people, have a vital "pulse" that reflects a state of health. In buildings, the pulse is found in the elevator system. When elevators give uncrowded, efficient service, the regular pulse of their operation indicates a healthy condition.

Yet if your building is approaching "middle age", the pulse of elevator service may be slow and irregular because it has been outstripped by traffic demand. That's the time to bring your elevators back to par...put them in "new" condition.

Westinghouse has specialized in modernizing existing systems, utilizing equipment that has been developed for new installations. Rototrol in-

ductor floor landing, automatically operated doors, automatic dispatching systems, Selectomatic . . . these are just a few of the many recent improvements now available to give your building all the benefits of modern, efficient vertical transportation service.

Westinghouse offers a complete modernization planning service, working with you and your architect or engineer to make your building hum again. For full information, write to the Westinghouse Electric Corporation, Elevator Division, 150 Pacific Avenue, Jersey City 4, New Jersey.

Westinghouse

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A sturdy Anchor Chain Link Fence is the only language most trespassers understand. It's the surest way to keep your plant safe from all snoopers, agitators and trouble-makers. In addition, it enables you to use outdoor space for storage—and controls traffic in and out of your plant. For information on exclusive features like Deep-Driven Anchors, which hold the fence erect and in line, write today for our illustrated catalog to: ANCHOR POST FENCE DIV., Anchor Post Products, Inc., 6670 Eastern Ave., Baltimore 24, Maryland.

Anchor Fence



ment, use, and surplus disposal of all government property and services (except personal).

• Standardization—To the businessman, such a setup would mean less red tape, standard purchasing specifications, standard forms and procedures, uniform federal supply catalogues. Also, the businessman would have his say on FWA's methods—the bill authorizes advisory committees drawn from industry. One disadvantage: The government would buy less from the businessman because of more efficient use of surplus goods between departments.

For the government, the system would end present costly duplications—as in warehousing, bookkeeping, administrative machinery, etc. It would wipe out surplus inventories, make for better use of material, create a basic organization capable of rapid expansion in time of emergency. Annual reports to Congress would be required as a check on activities.

• Passage Delay—The bill's length—32 pages—stands against its passage this session. There are less than 60 congressional working days before recess. Many congressmen feel anyway that enactment should await the final re-

port of the Hoover Commission on organization of the executive branch of government, scheduled for next January.

CHEAPER CAPEHARTS

Since Capehart radio-phonographs came on the market in 1931, they have been among the tops-top-quality and top-price-in the field. A hand-picked list of direct dealers, only one or two to a city, has marketed the machines.

Now there's to be a switch. Farnsworth Television & Radio Corp., manufacturer of the Capeharts since 1938, has announced a complete new Capehart line, with prices beginning at \$295. A nationwide organization will distribute it, along with the lower-priced Farnsworths. Distributors, with advice from the Farnsworth field force, will pick dealers for the smaller cities as well as for the big population centers.

The new Capehart line includes four television-radio-phonograph combinations and Capehart radio-phonographs. Prices will range up to \$1,595. The Farnsworth line of radio-phonographs starts at \$99.50; it also has three tablemodel radios from \$24.95-\$27.95.



Stamps at Cost May Build Store Traffic

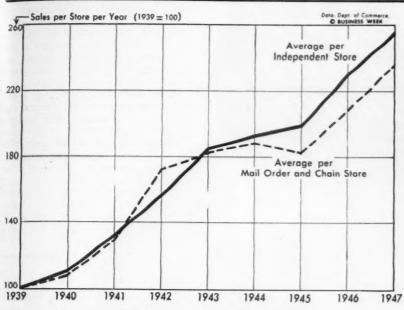
Commercial Controls Corp., Rochester, N. Y., is out to sell these stampvending machines, which it makes, to hotels and drugstores. They would bring no profit to the store or hotel, since they sell stamps at cost. But the big sales arguments for them are that they will be a convenience, build good-will—and traffic.

Meanwhile the Post Office Dept. is buying 1,500 of the machines for trial.

They will be tested in various areas and in different types of post offices to see if they relieve congestion. If they do, and if the budget permits, the department will install many more next year. Cost of the machines is \$450 each.

Here, as the new machine went into service, New York City's Postmaster Albert Goldman watched as it sold stamps to actress Ann Blyth.

READERS REPORT:



STORE SIZE at a new high (BW-Apr.3'48,p64)

Inflation-and Store Size

Sirs:

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... All of us, no doubt, have some understanding of the inflation factor between 1939 and 1947, but can this be taken for granted in presenting such a chart as yours [above]? Of the 151.6% average increase in dollar sales per unit, your BLS table [BW—Apr.3'48.p112] shows that all (or more than all) can be accounted for by an increase of 167.5% in the cost of living. The only significance that can be attached to the chart is:

- (1) Inflation—which your article doesn't mention.
- (2) The relative sales of independents

On the second point, it is interesting to note that 1942 showed a peak for chains, compared with others. I suspect that an alert researcher could have established the fact that this resulted from mass outlets getting more of what little carryover there was on hard lines, appliances, and such. Thereafter there was none for anyone. From 1943 to 1947 availability superseded price as the buyer's guide—therefore, the corner store gained at the expense of the downtown merchant and mail-order. Don't overlook the effect of tire and gas rationing on downtown locations, either.

The same forces which caused a rush toward advertised brands will (and should be) reversed as competition resumes. For 20 years I have been in a position to know that the most-adver-

tised product is the poorest buy 90% of the time.

P. S. BARROWS

MONTEBELLO, CALIF.

• As Reader Barrows writes, average store sales have increased 151.6% since 1939. But the Bureau of Labor Statistics cost-of-living index has increased only about 70%. He apparently misread the BLS index figures. In August, 1939, the index figure was 98.6. In February of this year, the figure was 167.5. This is an increase of only 70%.

The BLS index reflects retail prices. The wholesale index has not gone up so fast as the retail index. Therefore, the retailer was in the position where his inventory costs were not going up as fast as his selling prices.

Many costs of doing business did not advance in nearly the same ratio as retail prices. Thus, rentals on the average have gone up 11%; the cost of gas and electricity has actually declined since 1939.

It is perfectly true, of course, that inflation plays a part in all of this. On the other hand, since sales per store went up 2.17 times as fast as retail prices, inflation probably isn't as much of a factor as one might think.

Faith Lacking?

Sirs

After reading your study of the probable consequences of a warmer cold war and of an all-out war [BW—Apr.24'48, p19], I feel impelled to suggest that faith is supposed to remove mountains



Plenty of fuel wasted at your house last winter? You weren't any too comfortable, either, were you? It will make a big difference if you replace that old, inefficient, costly-tooperate heating equipment with modern, perfected Toridheet automatic

heating.

Then the house will be warm as toast and you'll still conserve fuel. That clean, quiet and healthfully uniform heat will make your home better to live in ... worth more to own because it will cost less to heat.

But don't wait till winter's here . . . solve your heating and fuel economy problems now. Ask the responsible Toridheet dealer for his recommendations and estimate today. Replacement is amazingly fast. Takes but a few hours.

The Toridheet dealer is listed in the yellow pages of the Telephone Directory under "Oil Burners." Phone him now, or write direct to us for information. CLEVELAND STEEL PRODUCTS CORP., Cleveland 2, Ohio.

"Your Home's Complete with Toridheet"



Famous Toridhees Rotary Wail Flame Saves Fuel.



TORIDHEET DIVISION

CLEVELAND STEEL PRODUCTS CORPORATION CLEVELAND 2, OHIO

A COMPLETE LINE OF AUTOMATIC HEATING EQUIPMENT FOR OIL AND GAS



Better Sound—only Illustravox has the famous Magnavox speaker and lifelike tone.



Better Pictures—sharp, brilliant projection of black and white or color film.



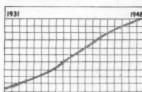
Easier Operation — Illustravox can be set up and "on screen" in less than 3 minutes.



Sturdier Construction—built to withstand hard use by salesmen in traveling.



Better Portability — Illustravox weighs only 20 lbs. . . . has full-scale components.



Leadership — Illustravox is the pioneer and leading sound slide-film equipment builder.



Reputation – over 80% of all sound slidefilm projectors now in use are Illustravox.



No fumbling, no false starts, no restless audiences—Illustravox puts your story "on screen" immediately. It's so easy to set up a school boy can do it in less than three minutes. The pictures are sharp and bright; the sound reproduction is clear and true.

Industrial leaders know that their equipment can make or break the best sound slidefilm. This is why they insist on Illustravox. It's built to stand the hardships of travel and constant use, and many still are giving good service after ten years on the job. Over 80% of all sound slidefilm equipment now in use is Illustravox. Ask your film supplier for a demonstration today, or write The Magnavox Company, Illustravox Division, Dept. 52, 2145 Bueter Road, Fort Wayne 4, Indiana.

Where To Buy Illustravox. You can obtain Illustravox equipment through leading commercial film studios and Audio-Visual dealers. For the name of your nearest supplier write The Magnavox Company.

ILLUSTRAVOX

DIVISION OF THE Magnavox COMPANY

and I find evidence, in your study, of a lack of faith.

If we believe in the capacity of the people to operate a free enterprise system with competition, protection of property rights, etc., how can we justify turning our backs upon it in emergencies when we need its benefits most?

It seems to me that the correct approach should be through improvement in our leadership and direction.

Surely, when gains are heavily taxed, all but the minimum semblance of incentives may be drained away and yet the system is preserved.

However, may it not be reasonably argued that there is the same danger in excessively sapping the incentives as in eliminating them altogether?

I submit that a resort to compulsion by police powers is a confession of lack of faith and of inability to understand, plan, and administer our free enterprise system.

J. H. STERNBERGH AMERICAN DIE & TOOL CO., READING, PA.

 Modern wars are not conducted on a free enterprise basis. To assume that they are is not an act of faith but a denial of plain facts.

Small Businessman's Plea

Much has been written about the small businessman and his importance in the over-all picture. These days much is being written about inflation, H.C.L., etc. Yet when I introduced a relatively revolutionary idea to this [girls' coats] business by approaching two large coat buyers by mail, I wasn't even afforded the courtesy of a reply.

Roughly here is the plan: We manufacture children's coats on a contract basis. When I learned that several large mail-order houses were seeking manufacturers with whom they could place large orders of girls' coats at a "price," allegedly because they were so interested in holding the line, I wrote two of these firms and asked an opportunity to bid. I asked the opportunity to bid simply because several manufacturers told me personally the price was so low they couldn't hope to bid. Working on a low budget without a New York showroom we felt we could turn out an expertly tailored garment (we have a 30year background) at the price these firms were willing to pay. However, without a pretentious "front," it seems we can't get into the running.

Thank you for a fine job to business in general through Business Week.

RALPH SHOMER

VICE-PRESIDENT, DAVID SHOMER & CO., INC., HACKENSACK, N. J.



Able Helmsmen Needed-

WITH our way of life threatened and even our motives for helping others discredited, we drift toward destruction of the very thing that makes America the envy of the world --individual liberty. Who can steer our course, to save our craft from wreck?

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It is your job. You, as a leader in your community, must help arouse public opinion to a full appreciation of America's sacred heritage of free-

dom for the individual. You owe it to yourself, your family, your neighbor and your nation, to give of your experience and knowledge to pilot us safe through the storm.

These tempestuous times demand the intelligent work of leaders in every community to preserve America as the impregnable vessel of liberty and freedom. Here then, is important work for able helmsmen.

The Youngstown Sheet and Tube Company

General Offices -- Youngstown 1, Ohio Export Offices -- 500 Fifth Avenue, New York MANUFACTURERS OF CARBON, ALLOY AND YOLOY STEELS

COLD FINISHED CARBON AND ALLOY BARS - SHEETS - PLATES - WIRE - TIE PLATES AND SPIKES - ELECTROLYTIC TIN PLATE - COKE TIN PLATE - PIPE AND TUBULAR PRODUCTS - CONDUIT - BARS - RODS.



Then forget it

If we said you could install a 'Load Lifter' Electric Hoist and then forget it, we would be close to the truth! No matter how tough the job, the 'Load Lifter' does its work every day (every night, too!) and gives you safe, dependable service with utmost economy. Special features combined with basic strength are responsible ... ball-bearing self-enclosed motor; one-point lubrication; two-gear reduction drive; automatic load brake; fool-proof upper stop and lower block... and others.

Send for Catalog No. 215

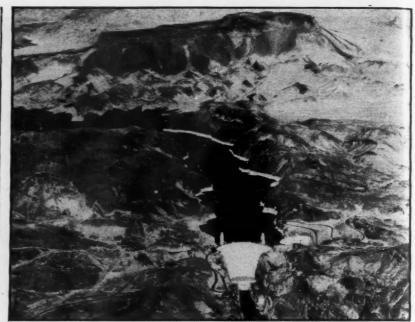


LOAD LIFTER'

MANNING, MAXWELL & MOORE, INC. MUSKEGON, MICHIGAN

Builders of 'Shaw-Box' Crones, 'Budgit' and 'Load Lifter' Hoists and other lifting specialities. Makers of Ashcroft Gauges, Hancock Valves, Consolidated Safety and Relief Valves and 'American' Industrial Instruments.





HOOVER DAM'S RESERVOIR has its drainage showing—we said (BW-Apr.17'48,p21). We continued: White fringe around lake reveals how water level has been down

Water Level Is O. K.

Sirs:

Having listened to lectures and "talkies" at Hoover Dam within the past two weeks, I think I can speak with some authority. I would like to point out to you that while the caption under the picture [above] adds some point to your story about hydropower, it is nevertheless incorrect. The water in Lake Meade has been up to the top of the white fringe but once, and it will never get there again if the authorities can avoid it. It was allowed to go that high to test the gates of the sluiceway. By drawing excess water in the dry season the authorities hope to be able to cope with the heavy drainage in the wet season and keep the level at the point where it now is at all times. However, the storage capacity represented by that white line remains in case totally unexpected inundations occur. The water, of course, must never go over the dam or many millions of dollars worth of turbines, etc., would be destroyed.

L. L. BEEGLE

FENCHURCH EXPORT CORP., NEW YORK, N. Y.

 Reader Beegle has us with a misinterpretation showing.

Pitt Claims a First

Sirs:

Referring to "Machine Tool Salesmen to Go to College" [BW-Feb. 14 '48,p28], too much credit cannot be given the management, officers, and Sales & Service Committee of the Na-

tional Machine Tool Builders Assn., as well as Cornell University, for inaugurating this training course. However, your statement that "it is the first effort to provide adequate university instruction in selling capital goods" is false.

The writer, in connection with the Graduate School of the University of Pittsburgh and the Westinghouse Electric Corp., organized a course in 1931. E. A. Holbrook, then dean of the School of Engineering & Mining of Pitt, made the following statement, now a part of the foreword of a book published by McGraw-Hill Book Co.:

"Beginning in September, 1931, Mr. Lester gave for the first semester a course dealing with sales and service of industrial equipment. The course was successful and attracted a large group of mature students. It was continued and expanded in the second semester. . . ."

BERNARD LESTER

NEW YORK, N. Y.

Circ

. . . In the early 1930's I addressed a class at the University of Pittsburgh on the subject of "Machine Tool Distribution," and to the best of my knowledge this was the first address on this subject before a university class. This class dealing with the sale of capital goods, was organized by Mr. Bernard Lester in 1931 and, to keep the record accurate, I believe that your statement that the Cornell class is a "first" should be corrected.

WILLIAM K. STAMETS

PRESIDENT,
WILLIAM K. STAMETS CO.,
PITTSBURGH, PA.

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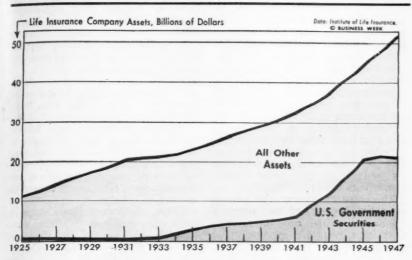
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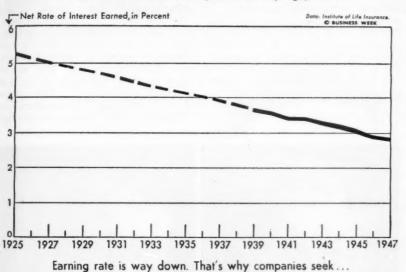
COI-

METS

1948



Assets of life insurance companies are sky-high, but ...



New Insurance Investments

Soaring policy sales mean big business volume for companies. But the problem now is how to invest funds to reverse earnings down-curve. Debate rages over whether common stocks are answer.

With policy sales zooming, the assets of life insurance companies have grown bigger than ever.

But their very size poses the problem of what to do with them. There's a real urgency to the question, for the net rate of interest earned on invested policyholder reserves skidded last year to 2.88%—the lowest on record. Since 1925, when it stood at 5.25%, the slant on that line has been steadily down. And when you're dealing in billions of investments, a drop of even one-tenth of 1% becomes a measurable amount.

This week the insurance companies were studying their assets and earnings figures. Their object: to make that down-curve turn up—by better-paying, perhaps new, types of investments. One way proposed, and hotly debated, is to invest in common stock.

• Bright Side—On the credit side of the books, the trade could cite these points:

(1) Assets of the life group now total \$51.5-billion, 67% more than in 1940.

(2) Outstanding life policies are



Jutura |

RICHARD BEST PENCIL CO., SPRINGFIELD, N. J.





DO YOU HAVE A GLASS PROBLEM?

For industrial glass, ask Dunbar. Dunbar has helped many industries to get what they want in glass—and effect economics, too—because of its versatility and experience. Perhaps you have a problem involving glass, or an application where glass parts can be used. Let Dunbar know your requirements. Write Dept. B 4.



America's Most Versatile Glass Plant

Dunbar Glass Corporation

DUNBAP, W. VA. - New York, Chicago, Cleveland, Los Angelo



For a Few Cents a Day!

List YOUR NAME and PHONE NUM-BER in any large city; install your phone in our office; we furnish p prominent business address, and answer all calls in YOUR NAME... 24 hours a day.

Our trained secretaries will accept orders, calls, telegrams, mail, etc., and forward them upon receipt to your local representative, or home office. Lowest rates available if you use one of our phone numbers.

Look for our insignia in your local Telephone Directory under Telephone Secretarial Service, or write our National Headquarters.



Associated Telephone Exchanges, Inc. NATIONAL HEADQUARTERS 595 Fifth Avenue, New York, N. Y. worth over \$190-billion. In 1940, they were worth \$117-billion.

How did the figures get that way? In the past, several factors—besides soaring policy sales—helped offset the declining investment return:

 Rising security prices permitted the companies to sell many long-held, highcoupon corporate bonds at fancy premiums over their purchase price.

• In the war years, high personal income tax rates, plus a dwindling supply of municipal bonds, sent the market for tax-exempt issues soaring. The life companies cashed in on this by selling at a good profit many such holdings.

 People now live longer than they used to. That means more premiums are paid on insurance policies before beneficiaries collect on them.

• The country's wartime and postwar prosperity has allowed the insurance business to recover more on doubtful assets than it had ever expected.

• Dark Side—But these favorable factors began to lose their steam months ago. The villain in the piece has been the drop in investment earnings.

• Why?—What has caused that earnings rate to drop? The huge flow of insurance funds into U. S. government obligations for one thing, particularly during the war years. These now yield only 2.5% at the most. The last few years they have been accounting for 40% to 46% of all insurance assets; in 1929, they acounted for only 2%.

Just as big a factor has been the nation's easy-money policy since the mid-1930's. That policy brought on waves of refunding operations as coporations replaced their high-coupon securities with new issues offering smaller and smaller returns. That, in turn, pushed down the yields that the life companies could get on their purchases of new securities.

• Results—These trends have started the companies scratching in new investment fields. They explain why, lately, the trade has sunk millions of dollars of policyholder reserves into housing developments, real estate mortgages, retail store properties, office buildings, and industrial plants. It's why, too, it has been stepping up purchases of new securities direct from issuers to save the middleman's charges.

Other insurance-company steps to boost returns: sharply increasing direct advances to concerns on unsecured loans that depository banks would usually handle; rebuilding volumes (and profits) of policy-loan departments.

• Improvement—These steps—together with the slight hardening in money rates last year—are beginning to pay off.

Boston's John Hancock Mutual Life Insurance Co. had an average net earning of 2.91% on its entire 1947 investment portfolio. But yield on its new investments climbed to 3.14%. New York's Metropolitan Life Insurance Co. (biggest in the life business) reports that



ASSOCIATION OF IRON & STEEL ENGINEERS
1010 Empire Building, Pittsburgh, Pa.
ATlantic 6323



George L. Harrison



Devereux C. Josephs

In Top Spots at New York Life

Two top bosses for the New York Life Insurance Co. were named last week by the board of directors. George L. Harrison was elected chairman of the board, filling a post which has been vacant for the past six years. He will be the company's chief executive offi-

cer. Harrison has been president of New York Life since January, 1941.

Devereux C. Josephs, a member of the board, was elected president and chief administrative officer. He has been president of Carnegie Corp. of New York since 1945.



"George Washington used to recommend this place"

Very near one of Philadelphia's great industrial sections is an inn where Colonial officers dined in Revolutionary days. Now, business executives lunch there daily.

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This close contact between tradition and the stir of modern industry is one of many special Philadelphia characteristics. If you're doing business here, in America's third largest market, The Pennsylvania Company can do a lot to help you understand the city and "find your way around."

Our 18 offices (we have more than any other local bank) are located in every part of the city and suburbs. This gives us intimate knowledge of the *entire* business community. As a client, you'll benefit by this knowledge. And you'll find payroll routines and every other phase of banking simplified—for, no matter where your plant is located, one of our offices is nearby.

Our heavy use of air mail in clearing checks and the 24-hour-a-day operation of our transit department will be helpful too. We can make things easier for you in many ways—from choosing business sites to making available a great store of business and financial records.

You will enjoy dealing with Pennsylvania Company officers. They are alert, modern, friendly people who will take a personal interest in giving you every service a bank can offer business. We think you'll enjoy banking with us—and profit by our knowledge of the city where you're doing business.

18 OFFICES

THE PENNSYLVANIA COMPANY

for Banking and Trusts
FOUNDED 1812

PHILADELPHIA

of

of

has of

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MEMBER FEDERAL RESERVE SYSTEM

FEDERAL DEPOSIT INSURANCE CORPORATION



There are undoubtedly money-earning possibilities in your plant which involve swift, accurate removal of metal with minimum man-power and operator effort with fewer extra operations.

And, doubtless, savings could be made in sharpening carbide tools with economical wheels surpassing all competitive types in hardness.

Perhaps there are possible economies in cutting metals, plastics or ceramics.

Maybe the buffing operations in your business cost more than they should.

If, so, think of BRIDGEPORT, FIRST. It's the first name in grinding, if your problem involves machines, abrasive wheels and the imaginative engineering that welcomes the "tough nuts" which affect production cost. Ask

BRIDGEPORT SAFETY EMERY WHEEL CO. 1308 West Broad Street, Stratford, Conn.

idgeport FIRST in Grinding

HORIZONTAL FACE GRINDERS, VERTICAL GRINDERS, CUTLERY GRINDERS, BUFFING LATHES, KNIFE GRINDERS, FLOOR GRINDERS, CUT OFF MACHINES, BUXITE ABRASIVE WHEELS.

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ACTUARIES AND AVERAGE ADJUSTERS

Chicago Washington Buffalo Superior

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neapolis Boston Indianapolis Paul St. Louis Portland

Detroit

St. Paul
Seattle

"the average rate of interest . . . on new investment purchases) . . "turned slightly upward during the last part of 1947 . . . for the first time in years."

• Not Enough—But students of the business don't think these new investment channels are broad enough. They want to see a complete overhaul of the insurance companies' investment thinking. They offer some interesting arguments for their stand.

• A Lot of Money—They point out that the life group long ago became the nation's largest holder of savings. Its resources now exceed by \$20-billion the combined savings deposits of both the mutual savings banks and the savings-and-loan group. And they were almost 25% larger recently than the total of time deposits held by all the country's commercial banks.

They point, too, to the huge funds-\$4.6-billion all told—the insurance business will have for investing this year. Its excess of income over disbursements is expected to run around \$3.3-billion. For reinvestment, there'll be another \$1-billion or so from amortization payments on mortgage holdings—or their complete retirement. Corporate debt payments will bring some \$200-million more; federal government debt retirements, another \$100-million, roughly.

• Too Few Channels—Available funds amount to too much money for present investment channels—mortgages, housing projects, real estate—to absorb. A lot of it will have to go, as usual, into long-term corporate obligations. But they may not be easy to find.

Here's why. While life insurance assets have been swelling, the amount of outstanding private corporate long-term debt has been shrinking. Between 1930 and 1946 this debt dropped from \$51-billion to \$41-billion. In the same period, life-company resources rose from less than \$19-billion to \$51-billion. And the life group already owns some 30% of the corporate debt as against 10% 18 years ago.

• Equity Capital Short—But—and here is where the chance for some adventuring comes in—there is a shortage of equity capital. That's the field of investment where many believe the insurance companies must finally start digging. Such people figure that this move is a "must" if the domestic economy is to be a people figure.

omy is to keep an even keel.

They argue that savings under our economic system must flow freely into capital. And it's better that it flow into equities than into debt obligations, on which interest must be paid regularly and which must be retired eventually. Otherwise, the blood stream may slow to a trickle or even stop in bad times.

• Pro-Equity—As the largest holder of savings today insurance companies that

 Pro-Equity—As the largest holder of savings today, insurance companies, that group maintains, have an obligation to the national economy, as well as to



The great new '48 Stinson. Cruising speed: 130 m.p.h. at 5000 feet. Non-stop flying range, 554 miles.

How a famous personal plane became America's No.1 Business Plane

W"Why does Stinson outsell all other 4-place planes combined?"

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The answer is so simple: The great new Stinson for '48 is America's most useful personal plane.

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their policyholders. Trouble may lie ahead if they don't stop using most of their investable funds for debt creation, it is argued. Some people wonder what will happen within a decade when the trade may have to invest as much as

\$7-billion annually.

There are leaders in the business who are alert to this situation. George L. Harrison, New York Life chairman, for example, recently urged that the life companies seriously weigh the pros and cons of equity financing. He wants the industry's Investment Research Committee, "which was created to direct its attention to just such questions as these," to start probing right now to "make certain that we are not missing any possible opporunity to make life insurance an even greater dynamic force in our economy."

• Equity Buyers—Some 32 states, including Connecticut, already let insurance companies invest in common stocks—with some restrictions. But New York State, home of companies holding some 40% of all the trade's assets, forbids the practice. And where it is allowed, companies aren't making much

use of the privilege.

John Hancock, for instance, could own some \$166-million of common stocks; at the score-taking, it owned less than \$15-million worth. Total equities held by insurance companies come to some \$250-million. That's only 1% of their total assets.

• Anti-Equity—The question is: What has been holding such companies back? The answer is clear. There aren't too many "blue chips" that would look as safe as, or safer than, some debt obligations the companies now own. And even the best of them suffer wide pice swings now and then.

The price swing is why the companies that can buy commons have been scared off. It's the main reason why others don't want them. It would take a lot of common-stock holdings to raise investment earnings noticeably above bond yields. A sharp slump in the stock market could cut asset values

to a damaging point.

Besides, equity opponents argue, if common stocks are such a safe investment medium for savings, why aren't all savings banks and savings and loan associations allowed to hold them?

• Rebuttal—Would-be diversifiers think something could be worked out—perhaps a new method of valuing "legal list" common stocks—to prevent violent price changes on the holders' books. Life companies, they say, wouldn't be trading in such securities; they would be hunting for sound long-term investments to boost income.

They rather play down the fear that too large holdings of common stock



Bidding Up Australian Wool Prices

Highest prices for Australian wool in more than a quarter of a century marked the recent reopening of the Melbourne Wool Exchange (above)—after a Queensland railroad strike had tied up shipping and hence wool trading. Overseas buyers at the exchange bought wool at \$1.85 to \$2.05 a

clean pound, duty paid. The wartime price for the same grade was about \$1.20 a lb. Unless raw wool prices ease, American textile men expect the cost of goods for next spring's clothing will rise at least 25¢ a yd. And higher prices for cloth mean higher prices for suits.



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22, 1948

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might bring charges of undue pressure on management policies. They feel the there could be enough strings tied to the size of the holdings to block any such kickbacks.

• Who'll Win?-Who'll win out anyone's question. But it's a cincle there'll have to be a lot of missionary work to win the whole life insurance trade over to common stocks as a cureall for its investment headache.

ICC Says No To Young's Trial Marriage

The Interstate Commerce Commission has banned Robert R. Young's proposed "trial marriage" between the Chesapeake & Ohio and the New York Central.

Last week, after months of consideration (BW-Dec.20'47,p81), it refused to allow C. & O.'s chairman Young and president Robert J. Bowman to become directors of the Central. Nor would it permit the C. & O. to vote freely the 400,000 shares of Central stock it now owns.

· Reasons-ICC thinks that Young's

conflict with the Clayton antitrust act by lessening competition between the two lines.

DISRUPT the long-standing arrangements between the Central and the Virginian Ry. (C. & O. competitor) for interchange of traffic—and thus inconvenience the public.

DIVERT traffic from the Pennsylvania, Baltimore & Ohio, Nickel Plate, Wabash, and Erie systems, in which the public has as great a stake as in the C. & O. and Central.

ICC dismissed-with pungent comments-Young's earlier assertion that the Central is dominated by a small clique of New York bankers. ICC pointed out that only six of the Central's 15 directors-as against eight of C. & O.'s 15-have ties with banks and trust companies.

• Young's Interests-The ICC also asserted that Young's personal control of the Alleghany Corp. stems from a direct interest of less than 1% of its assets. The Alleghany Corp., in turn. controls the C. & O.; yet its assets are only one-ninth the size of the railroad's and its interest amounts to only 3.34% of the C. & O.'s resources.

Young's actual control in Central's assets, said ICC, when traced "down through Alleghany and the C. & O. amounts to 0.00006%."

• Stopped?-Few Wall Streeters or railroaders think that ICC's ruling will stop Young completely. No one would be surprised to see him test the decision in a federal court.

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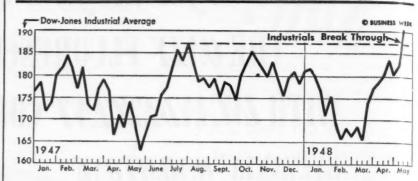


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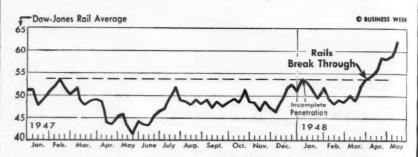
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THE MARKETS



Industrial share prices surpass the 1947 top, give bull market signal...



... Which is confirmed by the rail averages-before the fact

Charts Give the Bull Signal

Stock market break through its previous high last Friday was a "Dow signal" that a bull market is really on. But non-believers in Dow can turn it down by getting off after a guick ride.

When the stock market finally cut loose last week (page 19), the Dow Theorists came into their own—at least temporarily.

• Official Bull Market—Usually, most traders keep only half an eye on the Dow Theory. And most businessmen ignore it. But it was a Dow signal that touched off the wave of handover-fist buying that began last Friday. And it was the Dow Theory that for-

mally tied the bull market label to the current rally.

Anybody who wants to know why Wall Street had its fingers crossed on Thursday and a grin all over its face on Friday will have to look to the Dow Theory for his answer.

• Up Is Up—Critics complain that all the Dow Theory can tell you is that up is up and down is down. Many are more caustic than that. "The Dow Theorist," says one prominent Wall Streeter, "is a man who finds you stretched out bleeding in the street and solemnly informs you that you have been hit by a truck."

Just how much more than that the theory has to offer is a question. There are about as many different versions of the Dow Theory as there are practitioners of it. 60

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• Like Topsy—Part of the confusion comes from the way the theory evolved. Charles H. Dow, founder and first editor of the Wall Street Journal, worked out its elements. William Peter Hamilton, his successor, refined the theory

Security Price Averages

 This Week Mago
 Month Mago
 Year Ago

 Stocks
 Industrial
 160.9
 155.6
 152.1
 134.9

 Railroad.
 51.5
 48.9
 47.0
 37.0

 Utility
 73.2
 71.6
 68.8
 69.9

 Bonds

Bonds Industrial 120.4 120.2 119.6 123.1 Railroad. 107.3 107.1 107.1 106.7 Utility .. 119.0 119.3 17.5 111.5

Data: Standard & Poor's Corp.

and reigned for a quarter of a century (1903 to 1929) as its high priest. The raw material of the theory consists of editorials written by Hamilton and Dow at various times.

These sacred writings are sometimes inconsistent, sometimes downright contradictory. Hence, the modern Dow Theorist can cite scripture to support almost any stand he wants to take.

• Three Movements—The Dow Theory

• Three Movements—The Dow Theory starts with the assumption that there are three different movements under way in the market at any time:

(1) A primary, long-pull bull or bear trend:

(2) Secondary rallies or declines riding on the back of the primary trend; (3) Irregular and unpredictable day-

to-day fluctuations.

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Fundamentally, the theory holds that a primary bull market is under way when: (1) The top of each successive rally is higher than the top of the preceding rally; and (2) the bottom of each successive decline is not as low as the bottom of the preceding decline.

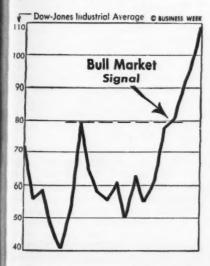
bottom of the preceding decline.

• Two-Part Signal—Thus, the Dow Theorist has to have a two-part signal to tell him that a bear market has ended and a bull market is starting. First he has to have a rally. Then he needs a decline that does not carry the averages below their previous low points. And finally, he needs another rally that goes higher than the first.

The top of the first rally is the key point on his chart. When the averages pass that spot, it means that a bull mar-

ket is under way.

• Bull Signal—For example, here is a simplified picture of the way the industrial average acted when it picked itself up off the bottom in 1932:



The signal point on this chart was in the neighborhood of 80 on the Dow-Jones industrials. That was the top of the first rally. The succeeding reaction petered out well above the previous low. Hence, when a new rally car-

ried past 80, the Dow Theorists got their bull signal.

In a bear market, the rule works in reverse. Each new decline drops down farther than the preceding one. Each new rally fails to reach the preceding one.

• Bear Signal—Here is a simplified picture of what happened when the market turned down in 1937:

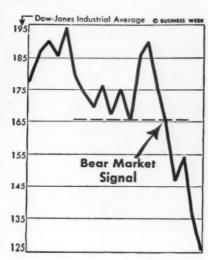


Chart-reading, however, is always easier in retrospect than it is on a day-to-day basis. The problem, to tell the intermediate jiggles from the significant swings, isn't always possible to solve.

And there are other complications.

And there are other complications. One is the part of the theory that holds that rail average must "confirm" the industrials before the signal means anything. In other words, both averages have to penetrate critical points.

• Penetration—There's also the question of penetration. Often the averages will go through an old top or bottom by a fraction of a point and then turn around. Modern Dow Theorists say that the penetration has to be at least a full point to count.

Volume plays a part in the theory, too. Rising volume on rallies and falling volume on declines is bullish. Increasing volume on declines and diminishing volume on rallies is bearish.

• Breakthrough—In the stock market breakout last week, all the signals were bullish. The rails confirmed in advance. They passed their old top early in April. Hence, when the industrials smashed through their critical point (186.85) on tremendous volume, every Dow Theorist promptly declared that a new bull market was on.

There is one hitch, though. Many a trader doesn't believe in the Dow Theory but does believe in the psychological response to a Dow signal. These traders jump in fast when the market goes through a resistance point, then after a quick ride desert the band wagon, and slap the market back down, just when the Dow signals look best.

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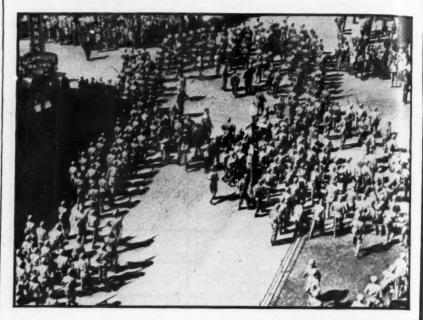
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Troops on the march in Minnesota are symbols of how . . .

Picket-Line Tension Is Growing

Violence flares in meat strike, threatens at Chrysler. One reason: Unions have been put on defensive by management's united front on wages. Caterpillar strikers return without any pay hike.

National Guardsmen on strike duty at Minnesota meat-packing plants were symbols this week of mounting tension on the nation's picket lines. Pitched battles have been a police problem in Chicago, Kansas City, South St. Paul, and Albert Lea, Minn. One death has resulted.

There were signs that the Chrysler Corp. strike (page 108) might take a similar militant course. C.I.O.'s toughfisted United Auto Workers showed explosive tempers this week in fighting on the Chrysler Highland Park picket line. And the Chrysler strike still is far from the showdown stage at which real gloves-off picketing usually comes.

• Unions on the Defensive-Back of the resurgence of militant picketing is a new defensive attitude in union halls. There is a growing belief that 1948 is going to be a decisive year for unions. Management's solid front in wage bargaining has led to a widespread rum-bling: Workers are going to have to accept, rather than bargain for, 1948 contract terms.

The sense of insecurity was increased this week as Caterpillar Tractor Co. reopened its big Peoria (Ill.) plant after a strike. Workers returned without any

immediate wage increase. Their leftist Farm Equipment & Metal Workers (C.I.O.) was a badly beaten union.

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• Meat Strike Violence-Gov. Luther W. Youngdahl of Minnesota ordered National Guardsmen on strike duty in South St. Paul and Albert Lea to curb picket-line violence. Helmeted troops with rifles were instructed to keep stockyards and Wilson & Co. plant gates open for anyone wanting to work. The union had defied a state injunction against mass picketing-the strikers' answer to a growing back-to-work movement.

Meanwhile, union negotiators were instructed to resume contract talks with operators of 140 struck meat plants. Ralph Helstein, president of the packinghouse workers' union, called the bargaining order a routine acceptance of a Federal Mediation & Conciliation Service invitation. Undoubtedly, there were these other strong considerations,

Rank-and-file pressure has been mounting for a settlement. The drain on both union and workers' finances has been heavy. The 9¢-an-hour offer from the "Big Four" packers-Swift. Armour, Cudahy, and Wilson-has

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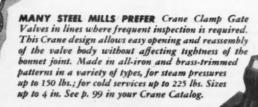
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DIVIDEND ON **COMMON STOCK**

The Directors of Chrysler Corporation have declared a quarterly dividend of one dollar (\$1.00) per share on the outstanding common stock, payable June 14, 1948, to stockholders of record at the close of business May 21, 1948.

B. E. HUTCHINSON

Chairman, Finance Committee

LANE-WELLS COMPANY

DIVIDEND NOTICE

The board of directors has declared a quarterly dividend of 40 cents per share on the common stock, payable June 15, 1948, to stock-holders of record May 26, 1948.

WILLIAM A. MILLER, Secretary-Treasurer

Atlas Corporation

Dividend on Common Stock

Notice 18 HEREBY GIVEN that a regular quarterly dividend of 40¢ per share has been declared on the Common Stock of Atlas Corporation, payable June 21, 1948, to holders of such stock of record at the close of business May 28, 1948.

WALTER A. PETERSON, Treasurer May 12, 1948.

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been looking better and better to idle workers. At the same time, their confidence in union-strike strategy has been seriously shaken by its failure to stop production in struck plants. And topping it all, an A.F.L. organizing drive in struck C.I.O. plants has raised new fears of strikers' job security.

• Competition - A. F. L.'s organizing plans were advanced last week at a convention of the Amalgamated Meat Cut-ters & Butcher Workmen (A.F.L.). This union's 10,000 members in "Big Four" plants accepted a 1948 contract early this year which gave them a 9¢ hourly pay hike (BW-Feb.7'48,p100). They have stayed on the job throughout the ten-week C.I.O. strike for more than that figure. Now the A.F.L. union feels that C.I.O. workers' dissatisfaction with the strike might make them ripe for a switch to A.F.L.

If a showdown should develop between the two in struck plants, the A.F.L. union would have a Taft-Hartley edge on its rival: It is a qualified union-eligible to ask for a National Labor Relations Board collective bargaining representative election. Officers of the C.I.O. union haven't signed necessary non-Communist affidavits.

• Too High a Hurdle-It was that T-H requirement that broke the strike of C.Î.O.'s Farm Equipment & Metal Workers last week at Caterpillar's Peoria plant. F. E. officers called off the five-week "Cat" strike (BW-Apr. 24'48,p114) after an NLRB election rebuff.

Caterpillar refused to bargain with F.E. on 1948 contract terms until the union had proved its right to bargain for 17,000 "Cat" employees. Since F.E. wasn't eligible to take its case to NLRB, the stage was set for a juris-dictional scramble. Three unions de-



NLRB VOTING at Caterpillar's Peoria (Ill.) plant ended one tense situation

manded a representation election: the A.F.L. auto workers' union, C.I.O.'s United Auto Workers, and the independent International Assn. of Machinists. F.E., barred from the NLRB ballot, had to campaign only for a "no union" vote.

Eas

ith 1 shaft

• Vote Count-The results of the poll last week: A.F.L. auto workers, 4,707; U.A.W.-C.I.O., 2,657; no-union (F.E.), 2,112; I.A.M., 1,170. Since no group got a majority, NLRB must hold a runoff election between the A.F.L. and C.I.O. auto workers' unions.

F.E. gave up its strike after the results were announced. It ordered strikers back to work, without a wage increase, to salvage what it could in F.E. membership.



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F.E.

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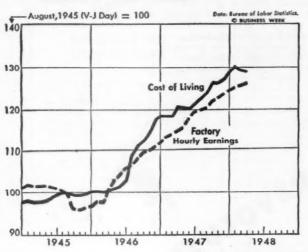
He is your local Dodge Dis-tributor—factory trained— qualified to suggest ways to improve your machine per-formance, increase production. Look for his name under "Pow-er Transmission Equipment" in your classified phone book.

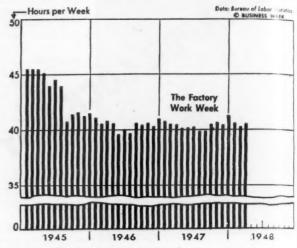


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A Quick Appraisal of the Labor Market's





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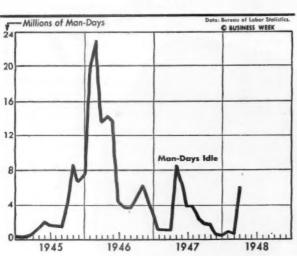
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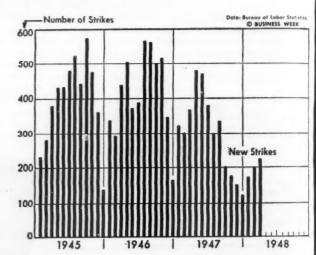
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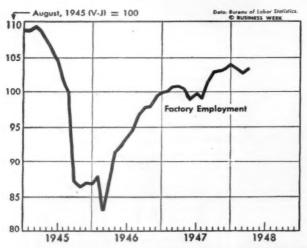
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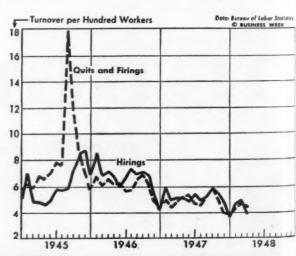
THE WORKER'S BUYING POWER





THE STRIKE PICTURE





THE LABOR MARKET

Balance Sheet

Figures behind manpower problem reveal rises in prices, wages, and strikes as Business Week resumes quarterly charts.

Three years ago, with statistical series distorted by war tactors, Business Week suspended its quarterly presentation in chart torm of significant labor figures. Now it resumes, as a four-times-a-year feature, the publication of graphic data on consumer prices, wages, hours, strikes, employment, and factory turnover.

• Series Changed—For those who followed the old series, two changes and one addition should be noted. The changes: The cost of living, hourly earnings, and factory employment have been put on a base of V-J Day (August, 1945) equals 100; the number of new strikes each month, rather than strikes in progress, are used to show the extent of active labor disputes. In both cases it was felt that these alterations would make the data more useful to businessmen today.

An addition is the hiring line in a turnover chart. It contributes a meaningful aspect to the labor-market pic-

ture.

• The Worker's Buying Power—No businessman is insensitive to the importance of cost-of-living figures. As labor statistics, their importance is overwhelming. In a period like the present, living costs exert a direct influence on everything that happens on the labor front. Currently, interest centers on whether the drop since February means a new stability or just a jog in a rising line, like that of early 1946.

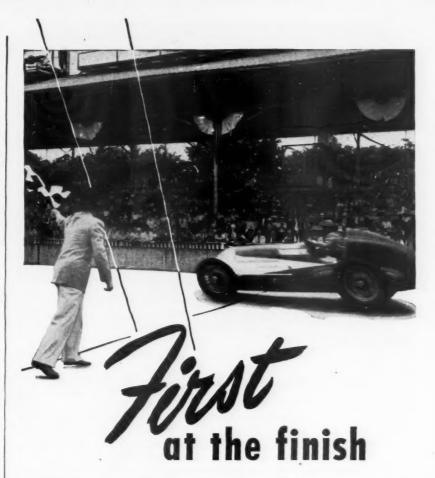
• The Strike Picture—Preliminary data already indicate that 1948 is costing more man-days on the strike front than 1947. The big question is: Will strike figures again approach their towering totals of 1946? While the man-days-lost chart may be making a discouraging record, the relatively small number of new strikes launched suggests that the

year may not be too bad.

• The Labor Market—The end of March saw close to 16-million workers employed in manufacturing, and it is apparent that we are now very close to the limit of our manpower resources. Negligible turnover strengthens the impression that employment, for the present, is not only at record peacetime levels; it is remarkably stable as well.

(These charts will be published again as soon as data are available for the second three-month period. Thereafter, they will appear at regular quarterly in-

tervals.)



Roaring across the finish line... "scorching the bricks" at 125 mph ... completing the 200th lap that brings the checkered flag, the man who drives for gold and glory is at his goal.

For more than 30 years, the Indianapolis Speedway's 500-mile classic has been a proving ground for men and cars alike. The first wave of the coveted checkered flag rewards the driver who can best meet the rigors of the long grind... whose car has withstood the killing four-hour test.

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Water Coolers

Murray Gets Mad

Steelworkers' convention hears leader blast Communists, employers, T-H law. Union will fight affidavit provision in court.

The convention of C.I.O.'s steel-workers' union in Boston last week was a preview of labor in the ice age.

a preview of labor in the ice age.

• Turning Point—The 3,300 delegates present—representing a pretty fair cross-section of the C.I.O.—will remember 1948 as the year things began to get tough. Before they convened, they had been set back on their heels by the steel industry's refusal to grant third-round wage increases. They had digested reports of their fellow unionists losing strikes almost everywhere they had been called. They had seen the Taft-Hartley act beginning to be transformed from a subject for debate into a real factor on the labor front. All in all, they couldn't escape sensing that things were different.

Their convention was different, too. With very little to crow about, their leaders sounded some new notes: red-baiting, corporation-baiting, Taft-Hartley-baiting.

• Factionalism—President Philip Muray's estrangement from labor's Communist wing had taken place before the Boston meeting. As head of the C.I.O., as well as of the steelworkers, he had come to the end of his silence on the Communist issue when the comrades embarrassed his unions by their attack on the Marshall Plan and their support for Henry Wallace. But at Boston he lashed out at them with an unprecedented savagery. The fervor he communicated to the delegates seemed to make them forget that there was no pay boost to talk about.

He went after the steel companies almost as hard. The delegates were told that it was the employers' villainy and avarice which had deprived them of a wage increase, and which threatened the country with economic ruin.

• Defying T-H—And he poured scom upon the handiwork of Sen. Taft and Rep. Hartley as if it were his union's shroud. By sheer force of oratory, Murray got a majority of the convention to go along with his strategy of continuing to defy the law.

The steel union is doing this by refusing to have its officers file non-Communist affidavits while, in the meantime, it has satisfied the other registration provisions of the act. Murray, thus pin-points his attack on the law to whal some constitutional lawyers say is its most vulnerable point. If the affidavit requirement is unconstitutional, the steelworkers are in compliance; and

ROTO-CLONE cures a press room headache

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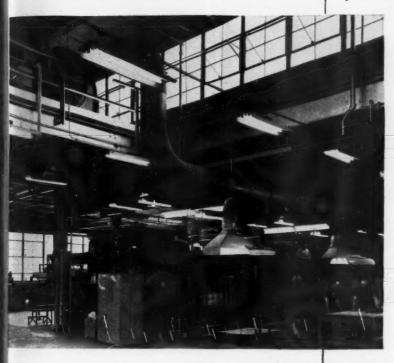
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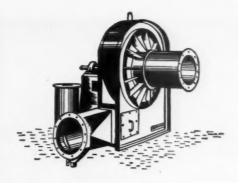
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One of two No. 20 Type W Roto-Clones, Arrangement A, removing excess "offset spray" from battery of Harris, Seybold, Potter and Miehle presses.



THESE modern high speed printing presses turn out thousands of impressions per hour. To speed the drying of the finished work and prevent adhesion between sheets, each printed

sheet is automatically given a shot of "offset spray" as it comes off the press.

This operation creates a certain amount of excess spray. If allowed to permeate the atmosphere, it creates an undesirable working condition, increases maintenance and results in costly soilage of finished work.

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CONTAINERS FOR GASES, LIQUIDS AND SOLIDS

Murray is determined to carry through the courts the case that will decide the

· Outlook-Thus, organized labor's immediate future-insofar as that future is represented by the steel union's outlook-will be filled with litigation, factional bickering, and propaganda. Most of the old organizing energy will be diverted into politics. Slowly but surely -if the great unions are to survive-there will be an accommodation to the new climate on the labor front.



IN GOLDFISH-BOWL JOB

Miss Josephine Roche (above) has a tough job ahead of her. Miss Roche (Vassar '08), president of Rocky Mountain Fuel Co. and technical assistant of John L. Lewis, is director of the controversial miners' pension fund. She is charged with administering a program on which Lewis and soft coal operators disagree—and one which is an important factor in current contract talks.

Hence, every move she makes (under the sharp eyes of Lewis as welfare-fund administrator) is going to get careful scrutiny from the coal industry. Her goldfish-bowl duties include paying pensions, collecting tonnage royalties-everything short of actual policymaking.

She probably won't be bothered by the attention she gets. She had plenty in her experience as a New Dealer and social worker. Miss Roche was on the advisory council which helped frame the Social Security Act in 1934. She also served a stint as Assistant Secretary of the Treasury. Since December, she has been associated with Lewis.

Meanwhile, Rocky Mountain Fuel Co. is in a state of suspended animation. The company isn't mining coal. It has leased some of its properties, in JAMES tends to lease more of it.

COM

Gos

1,086 COMPANIES REPORT

almost 2 billions of expansions in Pennsylvania plants

. creating hundreds of thousands of new jobs

The Pennsylvania Department of Commerce has just completed an official survey of expansions and modernizations in this State since the end

With almost 1,200 companies yet to be heard from, new capital outlays of \$1,789,698,713 have been tabulated. This comes on top of a war-time expansion of manufacturing facilities in Pennsylvania which was among the greatest in the nation.

This survey shows that when industry has a free choice in selecting its locations, the great economic advantages of a plant in Pennsylvania -the heart of the rich eastern market-are conclusive. If you are interested in a report of the survey in detail, send the coupon below.

1 Telephone Company

ALL TYPES OF INDUSTRIES PARTICIPATED The survey included returns from 52 different classifications of industry. Here are a few of the largest:

Three-year total for Capital Expenditures:

\$332,155,308

285,173,845

166,800,000

121,097,700

98,127,043

91,675,523

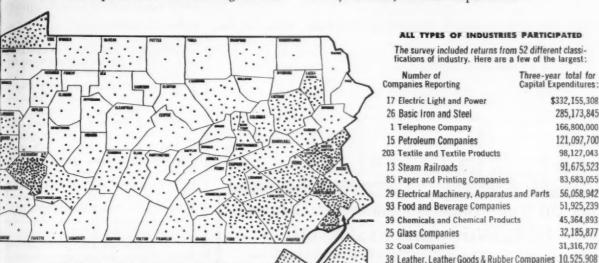
83,683,055

51,925,239

45,364,893

32,185,877

31,316,707



AVERAGE OF OVER A MILLION DOLLARS FOR

EACH DOT Each dot on this map represents a new industrial plant in Pennsylvania or one in which a major capital expansion has been made in the past two years or is to be made in 1948. There are 1,411 plants, reported by 1,086 companies, for a total of about two billion dollars. Reports are still coming in; almost 1,200 plants employing more than 100 persons each have yet to report.

State Department of Commerce Harrisburg, Pennsylvania

Please send me a copy of your report on the industrial survey of new plants and equipment.

Your Name

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF COMMERCE, HARRISBURG, PA.

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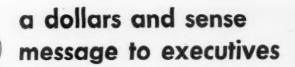
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ORUS J. MATTHEWS, Secretary of Commerce



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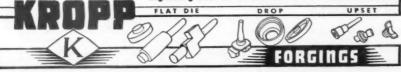
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FORD LABOR MAN John S. Bugas stuns U.A.W. with pay-cut demands

Unions Told Off

Ford's pay-cut proposal stiffens management's united front against third round. Unions call it "a conspiracy."

Last doubts that labor was operating in a new and harsher climate were dissipated this week. Ford Motor Co. shattered whatever illusions union leaders had left with a freezing letter to C.I.O.'s United Auto Workers.

• No Wage Boost—Ford insisted that "public security should get top priority in this year's negotiations." It made clear that it considers "public security" to mean no 1948 wage increases. Ford proposed, among other things, to eliminate "the substantial wage differential between Ford and major competitors." (Ford's average hourly wage is the highest among the Big Three.)

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The union said this would actually mean a wage cut for many workers. Hence, resentment flared in Ford's U.A.W. locals. It added to growing tension in the Chrysler Corp. strike (page 100) and in General Motors contract talks. Ford U.A.W. leaders rejected the company's proposals. They announced the union was standing firm on its original demands for "package" benefits estimated to cost 50¢ an hour (BW-May8'48,p102).

• Conspiracy Charged—U.A.W. interpreted the Ford move as a part of the "American industrial conspiracy" thold down wages—a gesture, the union said, intended primarily to discourage the 75,000 Chrysler strikers.

As a nearly solid management front against pay hikes took shape, other

nions were echoing the words "indus-nal conspiracy." Management called campaign an anti-inflation drive. he theory: Pay increases tend to be ased by higher prices; workers should operate in an industry-wide fight ainst rising prices by refraining from wage demands this year.

The campaign has spread through cel, automotive, electrical manufac-ring, and other heavy industries. It the one big and explosive issue in

rrent contract talks.

Auto Developments-But this week, ost attention centered on the automoe industry. Developments were pil-

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E FORD LETTER, signed by John S. Bugas, vice-president and industrial relations head, hasn't helped relations between the company and its big U.A.W. locals.

E CHRYSLER STRIKE has stopped cold all contract bargaining between the company and its unions. Detroit is oberly predicting a long, hard strike. GENERAL MOTORS, strike action no longer is considered impossible. U.A.W. has sent G. M. a formal 10day strike notice. A walkout could occur on May 28, when a 30-day extension of the present contract ter-

Many observers believe the U.A.W. dership would be mad to have its .M. and Chrysler members out at the ne time. There is, however, at least chance that both Chrysler and G. M. be shut down by the end of this onth. And there's even an outside ance that all of the Big Three might closed when the Ford contract runs

in July.

made Change in Tactics-This is directly inter to past U.A.W. policy under esident Walter Reuther. It is exactly at the Communists in the auto ion have plugged for unsuccesfully in past. Detroit observers see the high lange in strategy-if it comes-as an lication of the emergence of Emil tually azey as a kingsize policy-maker.

Mazey is carrying the ball for Ford's enther, who is recovering from a shotwound (BW-Mayl'48,p108). He strike lieves in slapping foes down when some ey get tough. However, Mazey won't rs re dertake too much without Reuther's They proval. It's possible that the success firm lip Murray and John L. Lewis have d in the past with industry-wide hou kouts has swayed U.A.W.

Isewhere-The automotive industry gaining continued to spearhead the ole G.I.O. third-round wage attack. el and electrical industry labor-manment relations were deceptively et. But elsewhere on the labor front otiations were getting hotter:

front Coal-The big threat to all industry other is a coal strike. Negotiations for



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■ There is nearly half a century of conveyer engineering and manufacturing experience and the facilities of three modern plants — behind this trademark. To plant engineers in many industries, it indicates a conveyer service that is complete from proposal engineering through erection in the field.

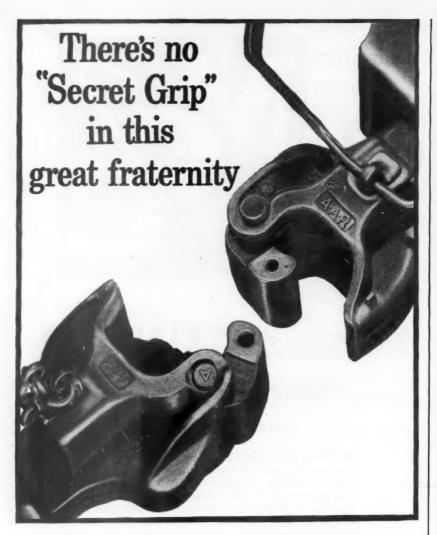
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This simple fact makes it possible to combine in a single freight train many cars loaded at many different points, moving toward many different destinations.

This in turn makes possible the low-cost continent-wide mass transportation system which only railroads provide. And on mass transportation depends the mass production which our nation must have to keep itself well fed, well clothed, well housed—sound and strong.

These rugged railroad couplers, whose "universal grip" often holds together more than 5,000 tons of loaded freight cars, are the product of never-ending research and tests. Begun sixty years ago by the Master Car Builders, this work is now carried on by the railroads through the Associa-

tion of American Railroads, the mutual agency for the betterment of all railroading.

This is just one example of how railroads, which compete with one another for business, also work together to improve such standardized and interchangeable parts as wheels, axles, trucks, brakes, draft gear, and safety devices. Such cooperation between railroads helps provide America with the most economical, the most efficient, and the safest mass transportation system in the world.



a new contract between John L. I ewis' United Mine Workers and the soft coal operators got under way this week. Lewis wants substantial gains: an increase in the miners' vacation bonus from \$100 to about \$250; a reduction in the work-week from 40 hours to 35 hours without any pay cut (which would boost the wage rate about 24¢ an hour); and settlement of the old-age pension dispute, with an increase in the tonnage-royalty rate on coal from 10¢ to 25¢, or even 40¢.

Operators will fight the present \$100a-month pension and will try to case other terms in the Lewis contract. There's a strike date (July 1), but new injunctive action by the government seems certain if a strike occurs.

Anthracite operators, who ordinarily have an easier time with Lewis, also started contract talks with U.M.W. this week. The hard-coal contract deadline is July 10.

• Transportation—Negotiators for three operating brotherhoods and major railroads resumed contract talks this week. Their aim: to try to find a compromise on eight unsettled work-rule issues. The compromise may come quickly, to stop government operation of the roads.

• Communications—One telephone-industry strike threat ended this week another got government attention under the Taft-Hartley law. The independent Communications Workers of America signed its first 1948 contract with a Bell System affiliate (Chespeake & Potomac Telephone Co.). The union predicted this pact would set a pattern for other peaceful Bell settlements. The contract did not boost wages, but it liberalized termination pay and made other concessions to the union.

President Truman invoked the national-emergency clause in the T-H law by naming a board of inquiry in the second strike threat. C.I.O.'s Telephone Workers Organizing Committee had threatened to call its 25,000 long lines members off American Telephone & Telegraph Co. jobs. The union charged A. T. & T. with refusal to bargain on a 30¢ wage demand.

gain on a 30¢ wage demand.

• Atomic Energy—The impasse between Carbide & Carbon Chemica Corp. and A.F.L.'s Oak Ridge (Tennunionists continued this week. Federa conciliators haven't been able to budge either side. An 80-day anti-strike injunction expires the first week in June (BW—May15'48,p15).

The Pictures—Acme—46, 80; European—117 (left); 120; Harriş & Ewing—50; Int. News—54, 86, 94; Keystone—117 (right); Press Assn.—20, 22 (bot.), 70, 100, 102, 108.

INTERNATIONAL OUTLOOK

BUSINESS WEEK

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Moscow is calling off the cold war and turning on a peace offensive.

The new line will probably last into next year, maybe longer.

The Russian plan is to reach an agreement with the U. S. after the November elections.

Meanwhile, the peace offensive will be pushed as hard, and as shrewdly, as the cold war was. Object: to better Russla's bargaining position.

Molotov got all he could out of his cold-war policy.

Eastern Europe and Manchuria are in the Soviet lap; there won't be much argument about that now.

But the policy didn't work in Italy and France. Instead, it brought a sharp response—the beginning of a tight western bloc backed by the U. S.

This threatened to shift the world balance of power heavily against Russia. So the Kremlin figured it was time for a new tack.

Stalin's approval of Henry Wallace's peace program is just one angle of the new propaganda line. Here are some of the others:

- (1) The day after the Italian elections, the Communist labor chief, Vittorio, said the Marshall Plan was O. K. (BW-Apr.24'48,p123).
- (2) Last month France's Communist leader, Thorez, started using the Popular Front line of the 1930's.
- (3) Soviet representatives at the Rome meeting of the World Federation of Trade Unions backed down on the Marshall Plan to save the WFTU.
- (4) German Communists in the Russian zone have been trying to build a new democratic-peasant party to supplement their weakening Soviet-run "Socialist Unity Party."

The Russian peace offensive is aimed only in part at the U.S.

Of course, it's meant to cut our rearmament program and build up Wallace.

But Molotov's main purpose is to deliver a knock-out blow to plans for a western European federation. He wants to push western Europe into a neutral position.

Molotov's argument may be: "Federation will prevent a Soviet agreement with the U. S. and increase the danger of war." His methods on the Continent will probably follow these lines:

- (1) Mass movements for peace based on national and international peace rallies and slogans such as "Build a united front for peace."
- (2) Pressure on western Europe's governments by offering them non-aggression pacts with the U.S.S.R. and Soviet satellites.
- (3) Bait, in the form of increased trade between eastern and western Europe.

Here's the Stalin-Wallace "peace" program that Russia wants to talk about after November:

- Reduce armaments and prohibit atomic weapons. This is meant to leave Russia the strongest military power in the world.
- (2) Stop all exports of weapons from the U. S. and the U.S.S.R. This would prevent military lend-lease to western Europe.
- (3) Resume unrestricted trade between the U. S. and the U.S.S.R. This would help Russia get the capital equipment it needs.
 - (4) Scrap all military bases on the territory of other United Nations

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INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK MAY 22, 1948 countries. This would take the U. S. out of its Middle East air bases—even, perhaps, out of the Panama Canal.

- (5) Scrap the Marshall Plan in favor of an expanded UNRRA operation (run by U. N.). This would give priority to nations, such as Russia, that suffered the most destruction in the war.
- (6) Make peace with Germany and Japan and withdraw all troops. This, when tied with No. 4, would leave both countries wide open to Russian attack.
- (7) Stop all shipments of arms to China, and set up an economic democracy there. This means turning the country over to the Chinese Communists.

You can be sure the U.S. won't buy much of this program.

It's possible that Russia itself won't want to give up its zone of Germany. (The zone has been milked dry economically, but it still has political and strategic value.) And Moscow might settle for a partition of China.

But Stalin will play every angle, in the U. S. and Europe, to force Washington to make concessions on these points.

What Stalin wants, of course, is another Munich. But he may settle for a compromise that eases the tension and boosts East-West trade.

He could then give the Russian people a breather by shifting the Soviet economy—temporarily at least—from a wartime to a peacetime basis.

Spain is coming back into the world-trade picture.

Madrid and Paris have just signed a one-year trade pact that covers \$150-million worth of goods each way.

France gets Spanish quicksilver, zinc, pyrites, cork, textiles, fruit.

Spain gets French machine tools, textile machinery, mining machinery, chemical equipment, trucks, tractors, phosphates, bauxite.

Madrid wants to boost its trade with the U.S., too.

Spanish bankers are in the U. S. dickering for a huge cotton credit. They've made approaches to more than one New York bank. They're also looking around for a big loan to finance industrial development in Spain. They want money for port development, mine exploration, machinery.

Discount reports that Argentina's new dollar restrictions are a bargaining move—to hurry the Economic Cooperation Administration into making offshore purchases in Buenos Aires.

The Peron government is really in a spot (BW-May15'48,p126). And it's our bargaining position, not Peron's, that has improved.

So the chances are good that Paul Hoffman can get a quid pro quo for the buying he plans to do in Argentina.

Hoffman may ask Brazil also for some concessions before he buys there.

Brazil's payments for U. S. goods have fallen behind by \$70-million or more. And U. S. traders would like to see Brazil pay off these bills with part of the ECA offshore money it gets.

The question of European currency devaluation is in the fire again.

President Truman's National Advisory Council thinks exchange rates are about due for an "adjustment" in half a dozen Marshall Plan countries.

There will be a lot of talking, though, before anything is done. And the British will probably talk the hardest and the longest. So don't look for a pound devaluation in the near future.

Contents securished under the secural convents on the May 22, 1946, Issue-Business West, 330 W. 42nd St., New York, N. V.

BUSINESS ABROAD





SHOES from the Czech Bata factory will pay for . . .

COAL from Poland's Silesian Mines as . . .

Czech-Pole Trade Gears Begin to Mesh

Poland has coal, waterways; Czechoslovakia has industrial skill and plants. They make an economic core for Eastern Europe.

PRAGUE—Czechoslovakia and Poland are now swapping such items as shoes and coal, with benefits to both. As a result, the two countries are rapidly becoming one—in an economic sense.

Their working cooperation was a pointed contrast to the talk that still surrounded the proposed United States of (Western) Europe at the Hague last week.

Less than a year ago, Poland and Czechoslovakia signed a five-year, catchall trade agreement (BW-Jul.12'47, p96). It is already beginning to bear fruit

• Nationalized Industries—Czechoslovakia and the new Poland rank first and second industrially in Eastern Europe. Since all industries employing over 50 persons are nationalized in both countries, there's no end to the possibilities for economic "cooperation."

Where the agreement pays off the most is in the union of Poland's (formerly Germany's) Silesian coal mines with the neighboring Ostrava industrial basin in Czechoslovakia. In the area, Polish and Czech coal, iron, and steel industries are operating as a single system. Polish power is supplying Czech factories. Czech engineers are supplying industrial techniques to agrarian-minded Poles. Transportation facil-

ities are being lumped together. And there is a free exchange of skilled and unskilled labor.

The merger will give Eastern Europe what amounts to a Ruhr Valley. Poland's Minister of Industry & Trade, Hilary Minc, says this area will soon be producing 90-million tons of coal and 4-million tons of steel a year. This is just about the amount of coal western Germany is getting out now, and about the rate of steel output it has figured for 1948.

• Industry and Agriculture—Other parts of Czech and Polish industry and agriculture are feeling the impact of economic union, too. Under a special agreement, Poland will produce threeton trucks, Czechoslovakia five-tonners. Polish flax production is being stepped up to meet the Czechs' needs. Czech sheep and cattle are moving to pasture in Polish fields.

Jointly owned factories are sprouting on both sides of the border. One power plant is now going up on Polish soil near Auschwitz where a good supply of low-grade coal is handy. Poles will supply the buildings; Czechs, the machinery. The Poles will pay off the Czechs in power from the completed plant.

• Foreign Trade—The Czech-Polish economic marriage has changed the

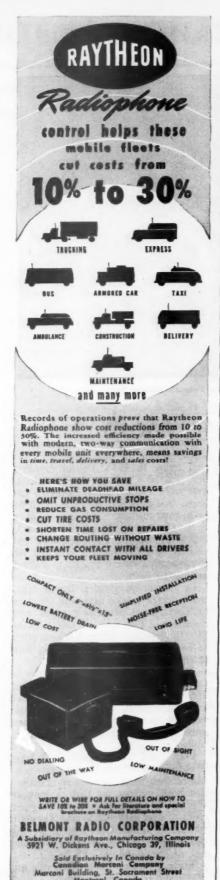
whole picture of both countries' foreign trade. In 1938, Poland supplied only 2% of Czechoslovakia's imports, took only 3% of Czechoslovakia's exports. But from now on Poland will be both best customer and best supplier to the Czechs. In the last half of 1947, Polish exports to Czechoslovakia increased sevenfold over the first half. At the same time Czech exports to Poland increased four times.

In the main, Poland traded coal, coke, electric power, eggs, and potatoes for Czech machinery, glass, paper, and chemicals. The famous Czech Bata shoe factories will deliver 3-million pairs of boots and shoes to Poland by July of this year.

Trade between the two countries is subject to long-term price fixing. The object: to beat the hazards of world price fluctuations. And tariffs and customs are out of the picture; they are unnecessary between two state-controlled economies.

Poland and Czechoslovakia will tend to channel their trade to their state-controlled neighbors in eastern Europe. But both nations say that as long as they can get reasonable terms they are eager to deal with the West. They are setting up Polish-Czech state buying commissions to do business with the rest of the world.

• Trading Points—Today, Poland's undeveloped economy may seem a poor mate for the Czechs' highly developed



industries. But in addition to political ties, Poland has a few good economic offerings for the Czechs: (1) high-grade, low-cost coal; (2) a good supply of unskilled labor; and (3) good seaports with river connections to the interior.

This last point sounds extra good to land-locked Czechoslovakia. Czech barges are now able to carry finished goods up the Oder to the Polish port of Stettin and carry back Swedish iron ore. (Last week Poland formally handed over to the Czechs a large slice of this Oder River port as a duty-free zone for imports and exports.) Also, a canal is under construction to link the Oder with the Danube. The first section is to be open in a few years; it will give Czechoslovakia's industrial hinterland a direct water outlet to the Baltic. When the whole project is com-

pleted, Czech goods will travel by wate to the Black Sea.

• Foreshadowings—When the Communist coup "aligned" the Czech 300 ernment last February, it paved the was for complete economic union of Czech oslovakia with the rest of eastern Farope. Since then the Communists had moved fast. This month's elections as already rigged—Czech voters will be offered the traditional single slate of candidates.

The next step for the Communiss will be to show that their economic union offers more to member state than the Marshall Plan. To do it wittake "cooperation" of the highest order It may even lead eventually to political union. One thing is certain: The Czech-Polish economic merger is setting a pattern for the future.

Anglo-Russian Trade Falters

British manufacturers are finding it hard to set up contract with Soviet for equipment promised in return for grain under short term trade pact. And long-term trade talks are scheduled soon.

LONDON-This week British capitalists and Soviet government traders still couldn't see eye to eye. They were squabbling over the estimated \$75-million worth of British goods promised under last December's Anglo-Soviet trade agreement.

• Threat—Under the terms of the short-term December agreement, orders for half the total value of the British goods must be placed by May 31. Otherwise Moscow can hold back the last 200,000 tons of coarse grains promised to Britain. And the long-term trade talks, scheduled to get under way at the end of this month, will be off to a bad start.

In the past four months British manfacturers have submitted bids for more than three-fourths of the industrial equipment specified by the Russians. So far no contracts have been signed. Best bet to meet the May 31 deadline is the North British Locomotive Co., Ltd., of Glasgow; it has offered to supply 1,100 narrow-gage, wood-burning locomotives for about \$30-million (BW-May1'48, p111). The North British offer accounts for almost half the total value of bids submitted so far; if accepted, it would be the largest locomotive contract ever tackled by a British firm for foreign account.

• Stumbling Blocks—Most British manufacturers are way behind North British in their dealings with the Russians. Four big obstacles have cropped up:

Specifications. At first the Russians were too vague. British manufacturers couldn't get the customary details for equipment wanted, were afraid of sub-

mitting bids that would turn out to blank checks. Many firms asked for performance specifications like those use in the U.S. But the Russians said n soap. So now the British firms have had to settle for detailed descriptions a each piece of machinery—part by part

Prices. British businessmen insist that they have offered to turn out good at prevailing world prices. But the Rusians continue to haggle. The cause of that Soviet stand may well be the price it got for the 125,186 tons of coars grain already delivered to Britain: The British government has been boasting that it drove a sharp bargain, but refuses to say just what it did pay.

fuses to say just what it did pay.

Payment Methods. Because of the tricky Russian specifications, British manufacturers want to get paid as the expenses are incurred. They say the will have to (1) make large cash out lays to retool for the Russian orders (2) subcontract part of the work, and (3) get more workers at a time when British firms are already overloaded with orders. At best it will be three or four years before the last of the Russian orders would be ready for delivery British manufacturers can't afford to the up their capital and wait that long to get paid.

Inspection. The Russians have tried to reserve the right to put off deciding whether or not the goods are acceptible until after they are landed at a Sovice port. But the British don't want to risk the expense of insurance and shipping unless they know the deal will gethrough. Another thorn from the same bush is the matter of disputes arising

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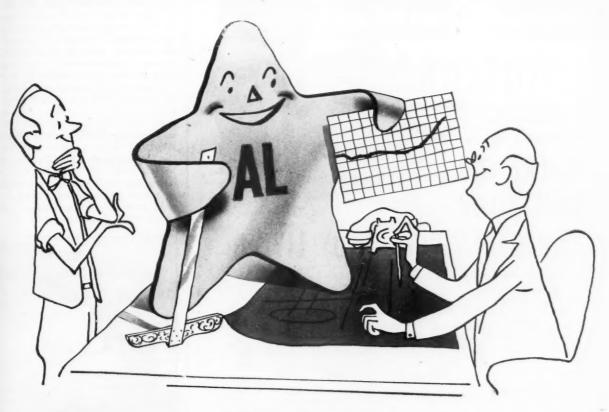
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over the quality of British goods. The Russians say they will submit to arbitration—but only before a tribunal of their own choosing. The British are holding out for a panel selected from a mutually acceptable neutral country.

• Hot Water—The British government has carefully avoided siding with the private manufacturers in these problems. It has enough troubles of its own.

Under the December agreement, the government itself is responsible for supplying 25,000 tons of light rails—complete with fishplates, bolts, and nutsfor narrow-gage railways. When the first Russian grain ships arrived in February, the first consignment of rails was ready to be loaded—but not the fishplates, bolts, and nuts. The Russian ships returned in ballast rather than take the rails without the accessories, which could not be manufactured for two



RUSSIAN GRAIN in British harbors hasn't meant peace with Soviet traders

months. Finally the Russians were satisfied that the accessories were forthcoming and began to load the rails. So far 8,350 tons have been shipped.

• More Trouble—In April the government was back in hot water. In order to fill its Russian commitments, the government had had to suspend releases of surplus rails to private buyers. As a result, at least nine private buyers had to repudiate export contracts that were to have been filled with surplus rails.

Later the government released enough rails to meet these contracts but not until the Russians had looked over the lot and picked out the best for themselves. The private buyers are now up in arms at having to take Soviet rejects.

• Set for Talks—One ray of sunshine in the foggy atmosphere of Anglo-Russian trade dealings: The Russians have shown no signs of packing up and going home. The Soviet Trade Delegation in London has just added 19 technical experts to its roster; it appears all set for the long-term talks. With four months' experience under their belts, it's a sure bet the Russians will know what they want at the conference table. British manufacturers, who still don't know how they will come out of the first agreement, will be anxious to learn what the Russians expect of them this time.

Germans Will Again Raise Their Beer Steins

Germans in the U. S.-British zones will soon be drinking beer again. Beginning next July, the ban on brewing Germany's national drink will be lifted—but drinkers will have to surrender bread ration coupons against each seidel.

Since the occupation, manufacture of malt beer for German consumption has been taboo. U.S. and British military governments reasoned that any diversion of bread grains could not in any

way be justified.

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Under the present plan, Germans will give up bread ration points at the rate of a 50-gram coupon for 1½ liters of beer (a little more than 3 pints). To replenish his supply of beer, the dealer must give up these coupons to the breweries. In turn, breweries must hand them over to the local food offices before more stocks of barley for brewing are released.

In the first 12 months of the plan (mid-1948 to mid-1949) not more than 46,000 metric tons of barley will be released for brewing purposes. This will insure the availability of barley for food

purposes.

• Four Benefits-In changing their stand on beer production, Allied offi-

cials saw four major gains:

(1) It will revitalize an industry normally employing 150,000 persons in some 10,000 plants scattered throughout the U.S. and British zones. In Bavaria alone, where brewing was a key industry, 30,000 persons were directly employed in the industry before the war.

(2) Continued employment of specialized workers will lay the groundwork for resumption of large-scale beer exports later on. This will bring in foreign exchange, and indirectly will help decrease the load on U.S. and British

taxpayers.

(3) The tax on beer is a cheap way of increasing public revenues. A ton of barley costs 220 reichsmarks and produces 30,000 liters of beer. This will sell for 18,000 reichsmarks, of which 10,500 is tax money.

(4) Legalization of beer manufacture will be a morale-booster for farmers, miners, and industrial workers; it will probably help step up production,



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LONDON LETTER

ONDON-The Labor government is getting ready to wind up its program of nationalization. At the Labor Party's annual convention in Scarborough this week, party chieftains were thumping for modernization of industry across the boards. They even gave private

enterprise a pat on the back. Minister of War and party wheel-horse Emmanuel Shinwell proclaimed: "Nationalization is about finished." He said the party was split over the government's only unfilled nationalization promise-state ownership of the iron and steel industry. Shinwell called the matter "all up in the air."

For the past several weeks the change in the party line has been worming its way out into the open. The government's nationalization machinery has been creaking audibly. Shinwell recently confessed to the public that nationalization measures hadn't been adequately prepared. And last week Sir Charles Reid, production chief of the National Coal Board, resigned-claiming the board's present policy is leading to disaster. (But he hadn't changed his mind about the necessity for nationalizing coal.)

The shift in policy doesn't mean that nationalization is a dead issue in Labor Party circles. There will probably be some sort of steel measure brought out this fall, but it will be a horse of a different color from the transport and coal bills.

The government strategy in steel may be to buy up all or part of the equity capital of the major firms, leave intact the existing management. There would be no repetition of the technique used in coal, transport, and electricity, where public boards own and operate the industry.

THE GOVERNMENT'S drive to streamline the British industries still under private enterprise will probably mean quick action on the Labor Party's monopoly bill, now before the House of Commons.

Britain is almost alone among modern industrial nations in having no machinery to control monopolistic power. Until the 1920's, Britain's free-trade policy protected the consumer somewhat from the

actions of monopolies. Free imports of goods tended to offset restrictive practices of local producers, but now that safeguard is gone. Price fixing, royalty rebates, arranged quotas, boycotts, and other such practices are having a field day.

The Conservative Party is going down the line with the government on this issue. It issued a proposed bill similar to the government's last month

Both sides are getting their cue from the United States. There is a growing conviction that U.S. industry's high productivity stems in part from the impetus that the Sherman and Clayton acts give to competition. The monopoly commission to be set up under the government's bill is obviously modeled after the Federal Trade Commis-

GOVERNMENT REPORT A on building materials, published last month, gives an insight into how the monopoly bill will work. The report covers 150 types of building materials and concludes that price-fixing and rebates among manufacturers are: (1) keeping prices up; (2) wasting manpower through elaborate distributive services; (3) preventing consumers from getting what they want.

The monopoly bill provides for investigations but lacks real teeth to carry them through. Its main strength lies in its threat of exposure where abuses exist. True, it does authorize fines and imprisonment for offenses. But this is theoretical: No offense is punishable until an order specifically outlawing it has been approved by both houses of Parliament. This will tend to make penalties under the bill hinge more on political than economic grounds.

The Labor government carefully excludes the restrictive practices of both labor unions and nationalized industries from the monopoly bill. But another government could rope in both merely by repealing a few words.

Just what kind of fish will eventually be caught by the monopoly bill is anybody's guess. If opposition to the government's steel measure gets too hot, the monopoly bill could be a useful weapon



FROM DARKEST AFRICA

The first load of Korina logs that the United States Plywood Co. has ever brought from the Belgian Congo arrived recently in New York City. Called "blonde mahogany" by woodmen, Korina is a white hardwood. U. S. Plywood says the Congo has a near-inexhaustible supply. The logs will be cut into veneers by Wm. L. Marshall, Ltd., of New York. Korina veneer furniture will be exhibited at the New York Furniture Show, June 21.

AUSTRALIA HELPS BRITAIN

MELBOURNE—Great Britain has begun to plan decentralization of its aircraft research and production plants. That means that Australia and New Zealand will play a bigger and bigger part in Britain's aviation plans.

This came out after a recent meeting here of the British Commonwealth Advisory Aeronautical Research Council. It was announced that the equivalent of \$100-million will be spent for aircraft, radio, and radar research centers in Australia and New Zealand. No details were given, but some projects are already in the cards:

- A WIND TUNNEL for testing speeds up to 1,873 m.p.h. The island of Tasmania has been suggested as a likely site; it has plenty of cheap hydroelectric power handy.
- A ROCKET RANGE, now being mapped out in the State of Central Australia. The Australian cabinet has just earmarked \$11-million for "preparatory work." "Major progress" in construction is expected in the next nine months.

RADAR TESTING in New Zealand. Tests have been going on in New Zealand since 1946. The U.S. has contributed much of the equipment.

British authorities are also toying with the idea of transferring aircraft production plants.

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BELMONT RADIO CORP
Agency—Beaumont & Hohman, Inc.
Agency
RICHARD BEST PENCIL CO 89
Agency Samuel Croot Co., Inc.
Agency—G. M. Basford Co.
BONNEY FORGE & TOOL WORKS 12
Agency Seberhagen, Inc.
CO., INC 92
Agency-Wilson, Haight & Welch, Inc.
Agency-Addison Lewis & Assoc
CANADIAN BANK OF COMMERCE 96
Agency—Albert Frank-Guenther Law, Inc. CENTURY ELECTRIC CO. 73 Agency—Oakleigh B. French & Assoc. CHRYSLER CORP. 102 Agency—Doremus & Co.
Agency—Oakleigh R. French & Assoc.
CHRYSLER CORP102
Agency—Doremus & Co. CLARY MULTIPLIER CORP. 31 Agency—Dana Jones Co. CLEVELAND STEEL PRODUCTS CORP. 83
Agency—Dana Jones Co.
CLEVELAND STEEL PRODUCTS CORP 83
Agency—Foster & Davies, Inc. COLD METAL PRODUCTS CO. 50 Agency—H. M. Klingensmith Co. COLUMBIA MACHINERY & ENGR. CORP. 42
Agency-H. M. Klingensmith Co.
COLUMBIA MACHINERY & ENGH. CORP 42
COMMERCIAL CREDIT CO
Agency—H. M. Kilngensnith Co. COMMERCIAL CREDIT CO. Agency—Van Sant, Dugdale & Co. Inc. COMMONWEALTH OF PENNSYLVANIA. 109 Agency—Ketchum, MacLeod & Grove, Inc.
COMMUNWEALTH OF PENNSTLVANIA
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Agency-Ketchum, MacLeod & Grove, Inc. CONNECTICUT DEVELOPMENT COMMIS-
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CONNECTICUT DEVELOPMENT COMMISSION Agency—The Albert Woodlev Co. CONSOLIDATED VULTEE AIRCRAFT CORP. 93 Agency—The Albert Midteam Inc. Agency—The Huchen Co. DAVIDSON MFG. CORP. Agency—The Buchen Co. DAVIDSON MFG. CORP. Agency—Almon Brooks Wilder, Inc. DETTRA FLAG CO., INC. Agency—The Earle A. Buckley Organization Beacher—Wildrick & Miller, Inc. DOGE MFG. CORP. Agency—Wildrick & Miller, Inc. DOGE MFG. CORP. Agency—MacManus, John & Adams, Inc. DOW CHEMICAL CO. Agency—MacManus, John & Adams, Inc. DOW CHEMICAL CO. Agency—MacManus, John & Adams, Inc. DUNBAR GLASS CORP. Asency—MacManus, John & Adams, Inc. DUNBAR GLASS CORP. Agency—MacManus, John & Adams, Inc. BUNBAR GLASS CORP. Agency—MacManus, John & Adams, Inc. BCO MANUFACTURING CO. BG. Agency—MacManus, John & Adams, Inc. EECTRIC EQUIPMENT CO. BG. Agency—Batter, Barton, Burstine & Osbern, Inc. ELECTRIC EQUIPMENT CO. LIER CO. Agency—Puller & Smith & Ross Inc. ENJAY CO., Inc. AVILED CONTAINER CORP.
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CONNECTICUT DEVELOPMENT COMMISSION Agency—The Albert Woodlev Co. CONSOLIDATED VULTEE AIRCRAFT CORP. 32 Agency—The Buchen Co. Agency—The Buchen Co. DAVIDSON MFG. CORP. Agency—The Buchen Co. DAVIDSON MFG. CORP. Agency—The Earle A. Buckley Organization DE WALT, NO. DAVIDSON MFG. CORP. Agency—The Earle A. Buckley Organization DE WALT, The Earle A. Buckley Organization DE WALT, The Earle A. Buckley Organization DOW CHEMICAL CO. Agency—MacManus, John & Adams, Inc. DOW CHEMICAL CO. Agency—MacManus, John & Adams, Inc. DOW CHEMICAL CO. Agency—MacManus, John & Adams, Inc. DOW ORNING CORP. Asency—Alemination Inc. EBCO MANUFACTURING CO. BECO MANUFACTURING CO. Agency—Wheeler, Kight & Gainey, Inc. ELECTRIC EQUIPMENT CO. LIER CO. Agency—Puller & Smith & Ross Inc. ENJAY CO., Inc. Agency—Charles I. Rumrill & Co. ELIER CO. Agency—Puller & Smith & Ross Inc. ENJAY CO., Inc. Agency—Oakleigh R. French & Assoc EN'L ELECTRIC CO., CONSTR. MATS. DIV. Agency—G. M. Basford Co. EEN'L ELECTRIC CO., AIR CONDITIONING DEPT. 106
CONNECTICUT DEVELOPMENT COMMISSION SION Agency—The Albert Woodlev (n. CONSOLIDATED VULTEE AIRCRAFT CORP. 93 Agency—Young & Rubleam, Inc. CONSOLIDATED VULTEE AIRCRAFT CORP. 93 Agency—Young & Rubleam, Inc. CRANE CO. 10. 67 AMERICA. 88 Agency—The Buchen Co. DAVIDSON MFG. CORP. 74 Agency—Almon Brooks Wilder, Inc. DETRA FLAG CO., INC. 47 Agency—The Earle A. Buckley Organization De WA.T., INC. 47 Agency—Midrick & Miller, Inc. DOGE MFG. CORP. 103 DOW CHEMICAL COX., Freil & Doik, Inc. 49 Agency—MacManus, John & Adams, Inc. DOW CHEMICAL COX. DOW ORNING CORP. 32 Agency—MacManus, John & Adams, Inc. DOW ORNING CORP. 32 Agency—MacManus, John & Adams, Inc. DUNBAR GLASS CORP. 89 Agency—MacManus, John & Adams, Inc. DUNBAR GLASS CORP. 89 Agency—MacManus, John & Gobern, Inc. ELCTRIC EQUIPMENT GO. 10. 86 Agency—Wheeler, Kight & Gainey, Inc. ELCTRIC EQUIPMENT GO. 10. ELECTRIC EQUIPMENT GO. 10. Agency—Puller & Smith & Ross Inc. ENJAY CO., INC. 46 Agency—McCann—Frickson, Inc. GAYLORD CONTAINER CORP. 51 Agency—Oakleigh R. French & Assoc. EN'L ELECTRIC CO., CONSTR. MATS. DIV. THE B.F. GOODRICH CO. Agency—Newell-Emment CO. THE B.F. GOODRICH CO. Agency—Newell-Emment CO. THE B.F. GOODRICH CO. Agency—The Griswold-Eshleman CO. GRAYBAR ELECTRIC CO. 76
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THE TREND

A Lower Tax on Brains

One of the worst quirks in our federal income tax law is the way it discriminates against those with professional training.

The law taxes earned income in the year received, even though that income results from years of study without compensation. The engineer or scientist spends extra time in schooling, then more lean years getting started. His earnings tend to be concentrated between 35 and 50. During this period his income is taxed at much higher rates than it would be if the same income were more evenly spread over his lifetime.

This makes it hard for the technical man to build up savings. Time was when a hard-working accountant or engineer could save enough of his fees or salary to provide a nest egg for his family. Today's high surtax rates—plus the rising cost of household necessities—make this pretty nearly impossible.

At congressional hearings on tax reduction, Harry Silverson of J. K. Lasser & Co. made what seems to us a financially practical proposal to end this discrimination against technical and professional men. In brief, Mr. Silverson wants to let this group average their income for tax purposes over the long period of apprenticeship, responsibility, and retirement instead of concentrating tax payments in the middle phase.

Here is the outline of the plan Mr. Silverson presented the House Ways & Means Committee:

(1) Let each taxpayer set up his own pension fund by setting aside each year up to 15% of his earned net income or of \$10,000, whichever is less.

(2) This amount would be invested in special non-assignable, low-interest government bonds.

(3) The bonds would be redeemable at any time but would mature, in any case, 10 years after the death of the purchaser.

(4) The amount invested in such bonds would be excluded from gross income in the year invested; amounts paid on redemption would become taxable in full in the year of redemption.

The effect would be to reduce taxable income in the years of high earning power and increase it in retirement years, thus averaging income over the entire period. This would reduce the total tax and markedly reduce the tax in the earlier years when saving is desirable. Salaried workers in non-technical fields could also take advantage of the scheme.

Easy on the Treasury...

The mechanics of the plan are simple. Bonds would be sold and redeemed by any bank. On sale, the bank would furnish a receipt, to be attached to the individual's income tax return as support for holding out that amount

from gross income. On redemption, the bank would withhold a fixed percentage as income tax and furnish that usual statement of tax withheld. The difference between the tax withheld and actual tax would be adjusted by the taxpayer's year-end return, as with the present withholding tax on salaries.

The plan won't cost the Treasury much. Since the money originally exempted from taxation is invested in government bonds—which must be cashed within a definite period—the Treasury is assured of eventually collecting its tax on the full amount. It has been estimated that the revenue loss in the initial year of operation would be at most half a billion dollars and possibly much less. Thereafter, as bonds were redeemed, the gap would narrow. Since more bonds would be cashed when business is poor and other personal income low, Treasury revenues would be raised in such years and thus made more stable than at present.

... And on the Economy

These private pension funds would have a number of desirable economic effects. They would permit more saving in inflationary years such as the present and more spending in otherwise depressed periods, when bond redemptions could provide needed purchasing power. The cash originally paid for the bonds could be earmarked for retirement of like amounts of other government obligations: This would shift ownership of the public debt from banks to individuals during inflationary periods (and vice versa during deflation). The Treasury has been trying strenuously—and unsuccessfully—to achieve this for some time. Moreover, since the bonds would be issued at minimum interest rates, the debt service cost to the public would be reduced.

Averaging income over a longer period creates a net tax saving. Sponsors say some of this saving might well be translated into "risk capital." It can be invested in industry since necessary personal saving is provided through the pension scheme. In this way it may again become possible for the lawyer, engineer, or accountant to have a direct stake in business enterprise.

Most important, the proposal would greatly increase management incentives. The opportunity for the technical man to increase his real income and provide security for his family has been a key feature in the growth of American industry. As management needs for college trained personnel expand, this opportunity must likewise be expanded. It is now being blocked by discriminatory taxation. Mr. Silverson has proposed a simple, workable method of removing the tax obstacle. Supporting his proposal will be to the interest of business and the public, as well as to the advantage of every professional man.

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